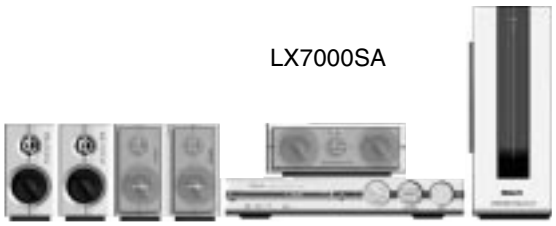
AV System

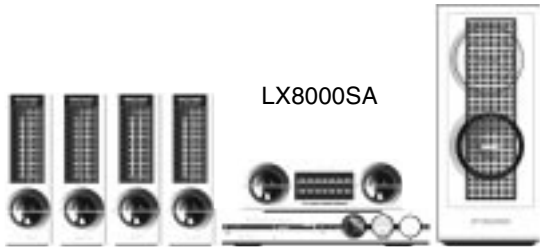
LX7000SA/21R/21S & LX8000SA/21S

Service
Service
Service

LX7000SA



LX8000SA



For repair information on the SD4.00SA DVD Module, refer to Service Manual "***DVD Module SD-4.00SA_CH - 3122 785 12480***".

Service Manual

Introduction of LX7000SA/21R/21S & LX8000SA/21S

For Service documentation please refer to Service Manual LX7000SA/22S & LX8000SA/21R/22S/37S - 3139 785 30078.

LX8000SA/21S refers to LX8000SA/21R with the following adaptations:

1. Mechanical & Accessories

Add	0386	4822 263 21092 ⚠	Adaptor Plug 6A 250V

LX7000SA/21R/21S refers to LX7000SA/22S with the following adaptations:

1. Mechanical & Accessories

Add	0353	4822 263 21206	Cable Cinch 1,7M (CVBS)
	0386*	4822 263 21092 ⚠	Adaptor Plug 6A 250V
	1607	3139 111 01510	FFC Foil 16P/260/16P AD Fold
Change	0352	3139 119 00811	Subwoofer SW7000SA/01S
	0387	3139 115 21630	Instruction For Use
	5001	3139 118 32540 ⚠	Mains Transformer
Delete	0360, 1617		

Note: * For LX7000SA/21S only.

2. Tuner Board : Refer to Tuner ECO6 AS/01 version (Systems Non-Cenelec).

3. Supply & Main Boards

Add	1909	4822 267 10728	Connector 4P VH
	1911	2422 129 16478 ⚠	Voltage Selector 2P 5A
	2913	4822 126 13589 ⚠	470nF 275V
Change	1905	4822 071 52502 ⚠	Fuse RAD LT 2,5A 250V
	3201	4822 052 10228 ⚠	2R2 5% 0,33W
Delete	2908		

(P.T.O.)

CLASS 1
LASER PRODUCT

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GB 3139 785 30106

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4. AVC Board

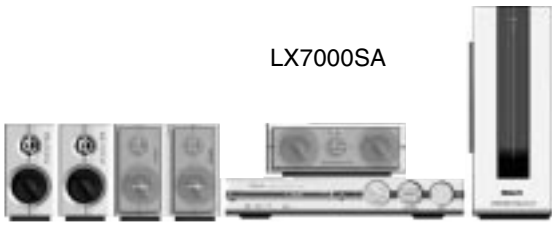
Add	3552	4822 051 30103	10k 5% 0,062W
	3553	4822 051 30103	10k 5% 0,062W
	4483	4822 051 30008	0R Jumper 0603
Change	2762	4822 126 14241	330pF 50V
	3180	4822 051 30222	2k2 5% 0,062W
	3568	4822 051 30272	2k7 5% 0,062W
Delete	1431, 2435, 2436, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2461, 2466, 2470, 2480, 2481, 2483, 2484, 2487, 2490, 2550, 2551, 2552, 2553, 2554, 2572, 2580, 2581, 3440, 3442, 3443, 3450, 3451, 3452, 3470, 3471, 3472, 3480, 3481, 3482, 3490, 3491, 3492, 3493, 3494, 3495, 3496, 3497, 3498, 3550, 3551, 3554, 3555, 3556, 5532, 5582, 7421, 7422, 7423, 7424, 7531		

AV System

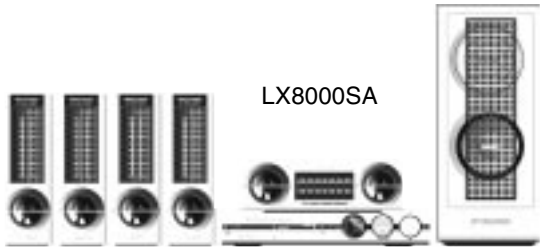
LX7000SA/22S & LX8000SA/21R/22S/37S

Service
Service
Service

LX7000SA



LX8000SA



For repair information on the SD4.00SA DVD Module, refer to Service Manual "***DVD Module SD-4.00SA_CH - 3122 785 12480***".

Service Manual

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CLASS 1
LASER PRODUCT

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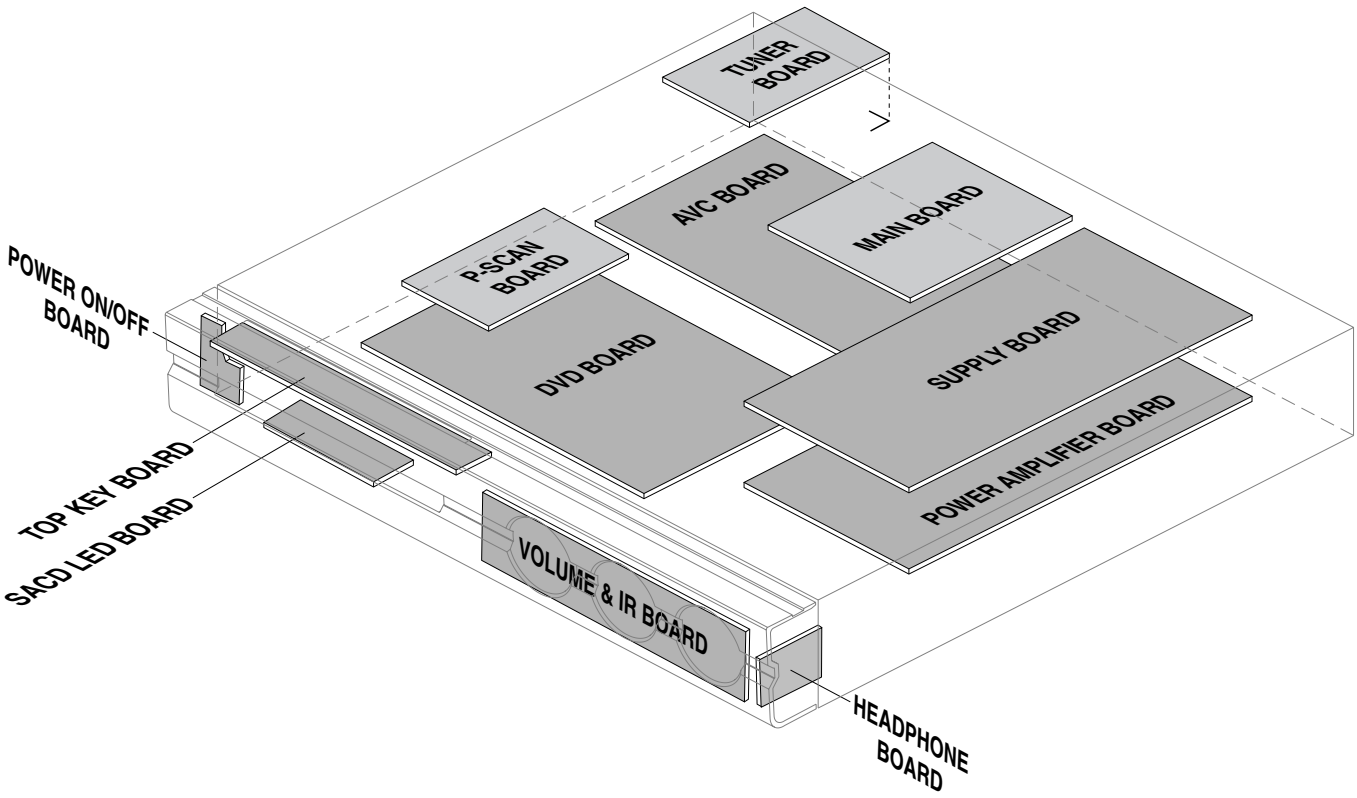
Version 1.0

PHILIPS

LOCATION OF PRINTED CIRCUIT BOARDS



VERSION VARIATIONS:

Type /Versions: / Features & Board in used:	LX7000SA /22S		LX8000SA /21R	/22S	/37S					
Aux in / TV in / Line out	x		x	x	x					
Digital in / Digital out	x		x	x	x					
Center out	x		x	x	x					
Subwoofer out (Woofer Line out)	x		x	x	x					
Video out (CVBS / S-Video)	x		x	x	x					
Scart out	x			x						
YUV out			x		x					
RDS	x			x						
Dolby Digital, DTS, Dolby ProLogic	x		x	x	x					
Incredible Surround	x		x	x	x					
Karaoke Features										
Voltage Selector			x							
ECO Power Standby (Clock Display Off)	x		x	x	x					
ECO6 Tuner Board - Systems Non-Cenelec			x		x					
ECO6 Tuner Board - Systems Cenelec	x			x						
Faroudja Progressive Scan (P-Scan)			x		x					
Subwoofer SW7000SA/00S	x									
Subwoofer SW8000SA/01S			x							
Subwoofer SW8000SA/00S				x						
Subwoofer SW8000SA/17S					x					

SPECIFICATIONS

GENERAL:

Mains voltage : 110-127V/220-240V Switchable for /21
120V for /37
220-240V for /22
Mains frequency : 50/60Hz
Power consumption : < 0.5W at ECO Power Standby
: <20W at Standby (DEMO mode off)
: 160W at Active
Clock accuracy : < 4 seconds per day
Dimension centre unit : 390 x 73 x 360mm

TUNER:

FM

Tuning range : 87.5-108MHz
Grid : 50kHz
100kHz for /37
IF frequency : 10.7MHz ± 25kHz
Aerial input : 75Ω coaxial
Sensitivity at 26dB S/N : < 7µV
Selectivity at 600kHz bandwidth : > 25dB
Image rejection : > 25dB
Distortion at RF=1mV, dev. 75kHz : < 3%
-3dB Limiting point : < 8µV
Crosstalk at RF=1mV, dev. 40kHz : > 18dB

MW

Tuning range : 531-1602kHz
530-1700kHz for /21/37
Grid : 9kHz
10kHz for /21/37
IF frequency : 450kHz ± 1kHz
Aerial input : Frame aerial
Sensitivity at 26dB S/N : < 4.0mV/M
Selectivity at 18kHz bandwidth : > 18dB
IF rejection : > 45dB
Image rejection : > 28dB
Distortion at RF=50mV, m=80% : < 5%

AMPLIFIER:

Output power (6Ω, 1kHz, 10% THD)
L & R, Center, Surround : 5 x 30W RMS for LX7000SA
L & R, Center, Surround : 5 x 35W RMS for LX8000SA

Output power (6Ω, 125Hz-12.5kHz, 10% THD)
L & R : 2 x 25W FTC for /37

Amplifier Frequency Response (-3dB): 250Hz - 32kHz
SURROUND : Multichannel, Stereo, 3D Sound
SOUND : JAZZ, ROCK, DIGITAL, CLASSIC
[DRAMA, ACTION, SCI-FI, CONCERT]

[.....] Sound effect available when playing a DVD/VCD disc.

AUDIO INPUTS/OUTPUTS:

Input sensitivity

Aux in (at 1kHz) : 880mV ± 3dB
TV in (at 1kHz) : 350mV ± 3dB

Output sensitivity

Line out (Left/Right) : 0.6V ± 2dB at 100kΩ
Center out (Vol. Max.) : 500mV ± 2dB at 47kΩ
Subwoofer out (Vol. Max.) : 0.76V ± 2dB at 47kΩ
Headphone output at 32Ω : 660mV ± 2dB (Vol. Max.)

VIDEO OUTPUTS:

All output terminals to be terminated with 75 ohms.

CVBS Out

CVBS Level : 1Vpp ± 0.1V
Luminance S/N : >=45dB (unweighted)

S-Video Out

Y Level : 1Vpp ± 0.1V
Y S/N : >=48dB (unweighted)
C Level (burst) : 286mVpp +1/-4dB

RGB / YUV Out

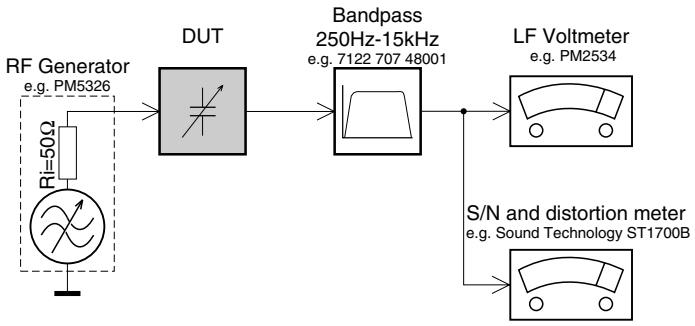
Amplitude : 0.7Vpp ± 0.1V
S/N : >=50dB (unweighted)

DIGITAL INPUT/OUTPUT:

To be terminated with 75 ohms.
Digital in : IEC 60958
Digital out : SPDIF Coaxial

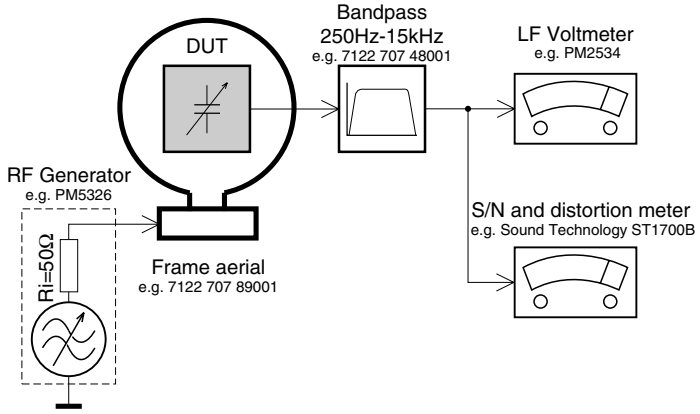
MEASUREMENT SETUP

Tuner FM



Use a bandpass filter to eliminate hum (50Hz, 100Hz) and disturbance from the pilottone (19kHz, 38kHz).

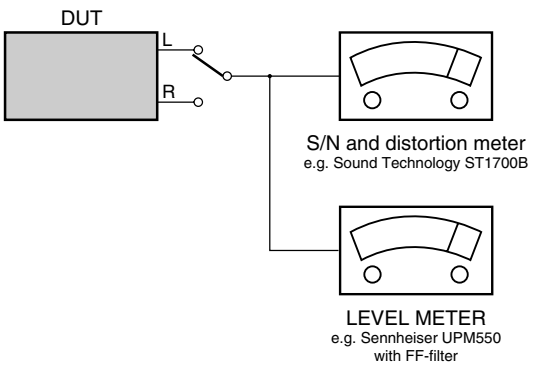
Tuner AM (MW,LW)



To avoid atmospheric interference all AM-measurements have to be carried out in a Faraday´s cage.
Use a bandpass filter (or at least a high pass filter with 250Hz) to eliminate hum (50Hz, 100Hz).

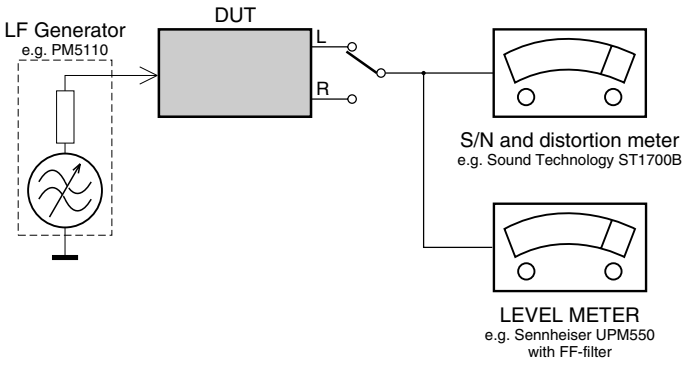
CD

Use Audio Signal Disc SBC429 4822 397 30184
(replaces test disc 3)



Recorder

Use Universal Test Cassette **CrO2** SBC419 4822 397 30069
or Universal Test Cassette **Fe** SBC420 4822 397 30071



SERVICE AIDS

Service Tools:

Universal Torx driver holder 4822 395 91019
Torx bit T10 150mm 4822 395 50456
Torx driver set T6 - T20 ..... 4822 395 50145
Torx driver T10 extended 4822 395 50423

Cassette:

SBC419 Test cassette CrO2 ..... 4822 397 30069
SBC420 Test cassette Fe 4822 397 30071
MTT150 Dolby level 200nWb/M 4822 397 30271

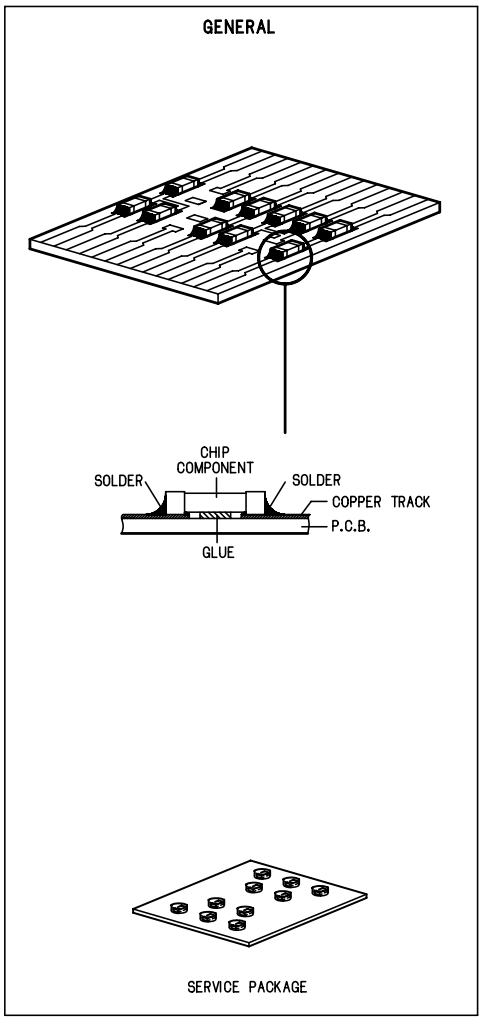
Compact Disc:

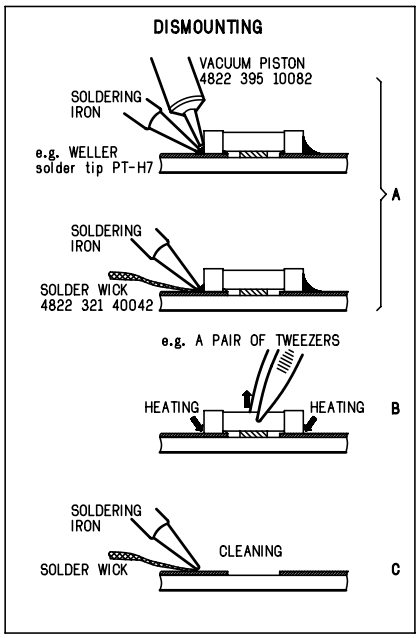
SBC426/426A Test disc 5 + 5A 4822 397 30096
SBC442 Audio Burn-in Test disc 1kHz 4822 397 30155
SBC429 Audio Signals disc 4822 397 30184
Dolby Pro-logic Test Disc 4822 395 10216

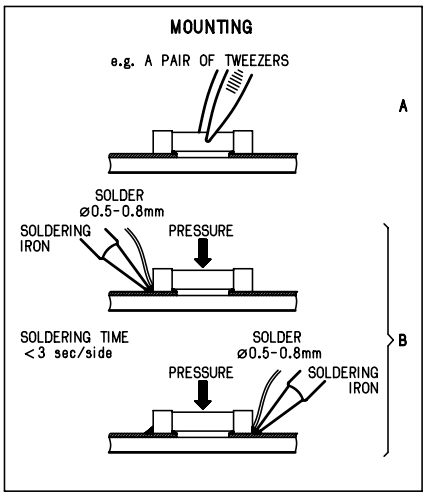
ESD Equipment:

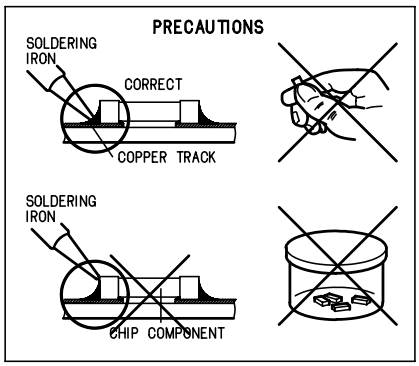
Anti-static table mat - large 1200x650x1.25mm ... 4822 466 10953
Anti-static table mat - small 600x650x1.25mm 4822 466 10958
Anti-static wristband 4822 395 10223
Connector box (1MΩ) 4822 320 11307
Extension cable
(to connect wristband to conn. box) 4822 320 11305
Connecting cable
(to connect table mat to conn. box) 4822 320 11306
Earth cable (to connect product to mat or box) 4822 320 11308
Complete kit ESD3
(combining all above products) 4822 320 10671
Wristband tester 4822 344 13999

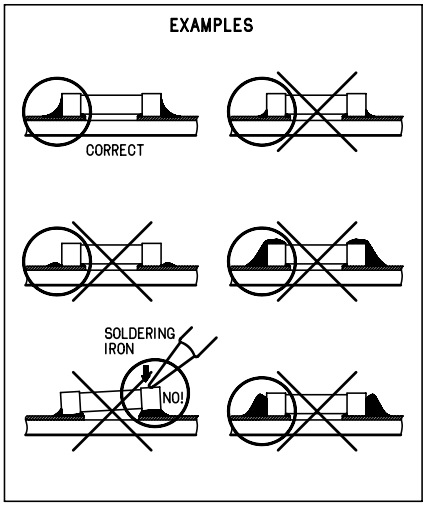
HANDLING CHIP COMPONENTS











ESD

GB WARNING

All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD).
Careless handling during repair can reduce life drastically.
When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance.
Keep components and tools also at this potential.

NL WAARSCHUWING

Alle IC's en vele andere halfgeleiders zijn gevoelig voor electrostatische ontladingen (ESD).
Onzorgvuldig behandelen tijdens reparatie kan de levensduur drastisch doen verminderen.
Zorg ervoor dat u tijdens reparatie via een polsband met weerstand verbonden bent met hetzelfde potentiaal als de massa van het apparaat.
Houd componenten en hulpmiddelen ook op ditzelfde potentiaal.

F ATTENTION

Tous les IC et beaucoup d'autres semi-conducteurs sont sensibles aux décharges statiques (ESD).
Leur longévité pourrait être considérablement écourtée par le fait qu'aucune précaution n'est prise à leur manipulation.
Lors de réparations, s'assurer de bien être relié au même potentiel que la masse de l'appareil et enfiler le bracelet serti d'une résistance de sécurité.
Veiller à ce que les composants ainsi que les outils que l'on utilise soient également à ce potentiel.

D WARNUNG

Alle ICs und viele andere Halbleiter sind empfindlich gegenüber elektrostatischen Entladungen (ESD).
Unsorgfältige Behandlung im Reparaturfall kan die Lebensdauer drastisch reduzieren.
Veranlassen Sie, dass Sie im Reparaturfall über ein Pulsarmband mit Widerstand verbunden sind mit dem gleichen Potential wie die Masse des Gerätes.
Bauteile und Hilfsmittel auch auf dieses gleiche Potential halten.

I AVVERTIMENTO

Tutti IC e parecchi semi-conduttori sono sensibili alle scariche statiche (ESD).
La loro longevità potrebbe essere fortemente ridatta in caso di non osservazione della più grande cauzione alla loro manipolazione.
Durante le riparazioni occorre quindi essere collegato allo stesso potenziale che quello della massa dell'apparecchio tramite un braccialetto a resistenza.
Assicurarsi che i componenti e anche gli utensili con quali si lavora siano anche a questo potenziale.

GB

Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified, be used.

NL

Veiligheidsbepalingen vereisen, dat het apparaat bij reparatie in zijn oorspronkelijke toestand wordt teruggebracht en dat onderdelen, identiek aan de gespecificeerde, worden toegepast.

F

Les normes de sécurité exigent que l'appareil soit remis à l'état d'origine et que soient utiliséés les piéces de rechange identiques à celles spécifiées.

D

Bei jeder Reparatur sind die geltenden Sicherheitsvorschriften zu beachten. Der Original zustand des Geräts darf nicht verändert werden; für Reparaturen sind Original-Ersatzteile zu verwenden.

I

Le norme di sicurezza esigono che l'apparecchio venga rimesso nelle condizioni originali e che siano utilizzati i pezzi di ricambio identici a quelli specificati.

"After servicing and before returning set to customer perform a leakage current measurement test from all exposed metal parts to earth ground to assure no shock hazard exist. The leakage current must not exceed 0.5mA."

"Pour votre sécurité, ces documents doivent être utilisés par des spécialistes agréés, seuls habilités à réparer votre appareil en panne".

GB Warning !

Invisible laser radiation when open.
Avoid direct exposure to beam.

S Varning !

Osynlig laserstrålning när apparaten är öppnad och spärren är urkopplad. Betrakta ej strålen.

SF Varoitus !

Avatussa laitteessa ja suojalukituksen ohitettaessa olet alttiina näkymättömälle laserisäteilylle. Älä katso säteeseen!

DK Advarse !

Usynlig laserstråling ved åbning når sikkerhedsafbrydere er ude af funktion. Undgå udsaettelse for stråling.

DISMANTLING INSTRUCTIONS

Dismantling of the Tuner Board and Main Board and AVC Board

1) Loosen 6 screws A to remove the Cover Top (pos 260).
   - 2 screws each on the left & right side (see Figure 1)
   - 2 screws on the rear (see Figure 2)
   - See Service position A

2) Remove 3 screws B and uncatch 2 catches B1 (see Figure 2) to loosen the Tuner Board (pos 1101).

Figure 1

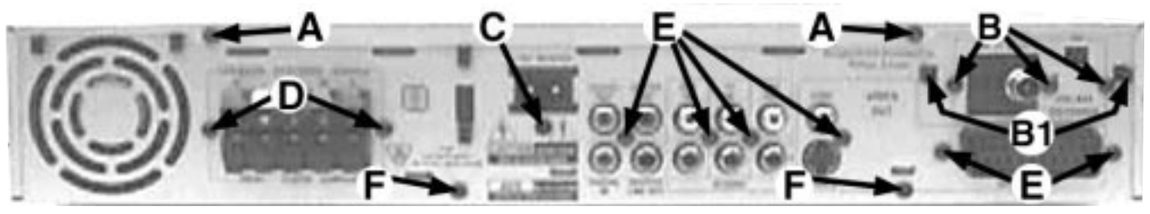


Figure 2

2-1

Dismantling of the Tuner Board and Main Board and AVC Board

3) Remove the Bracket PCB Mains (pos 259) by pressing the catch C1 inward and slide it up in the direction as shown in Figure 3.

4) Remove 1 screw C (see Figure 2) and uncatch 2 catches C2 (see Figure 4) to loosen the Main Board (pos 1104-B).
   - See Service position B

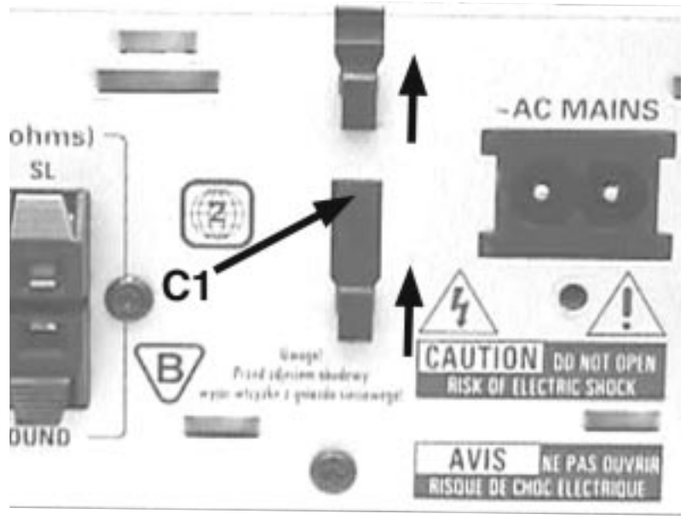


Figure 3

5) Remove 2 screws G (see Figure 4) to loosen the Bracket AV PCB (pos 255).

6) Remove 6 screws E and 2 screws F (see Figure 2) to loosen the Plate Rear (pos 251) and AVC Board (pos 1102).
   - See Service position D

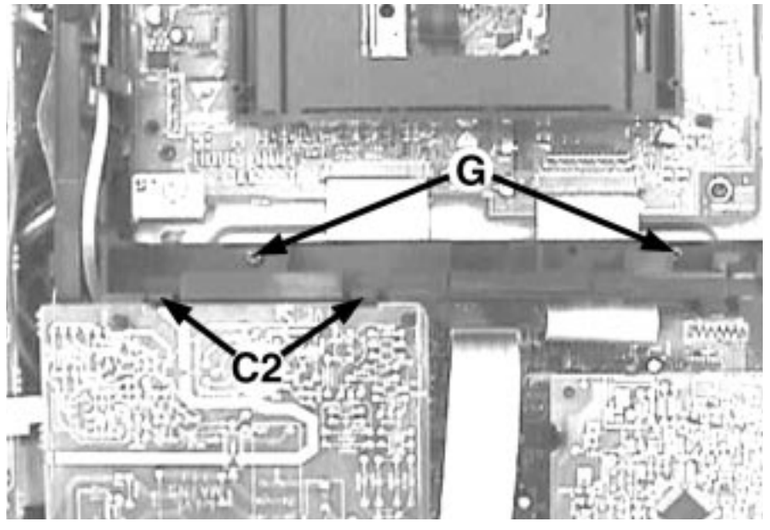


Figure 4

DISMANTLING INSTRUCTIONS

Dismantling of the Supply Board and Power Amplifier Board

1) Remove 7 screws D to loosen the Supply Board (pos 1104-A) and Power Amplifier Board (pos 1103).
   - 2 screws on the Plate Rear (see Figure 2)
   - 5 screws on the Plate Bottom (see Figure 5, 6, 7 & 8)
   - See Service position C

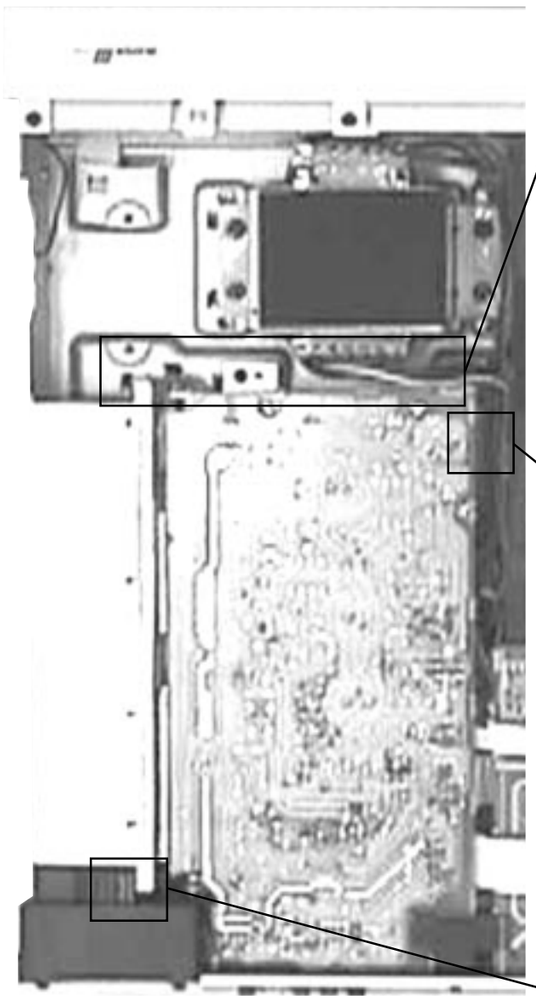


Figure 5

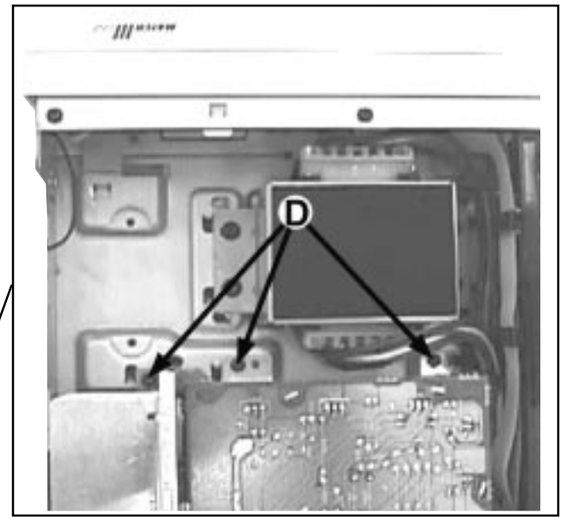


Figure 6

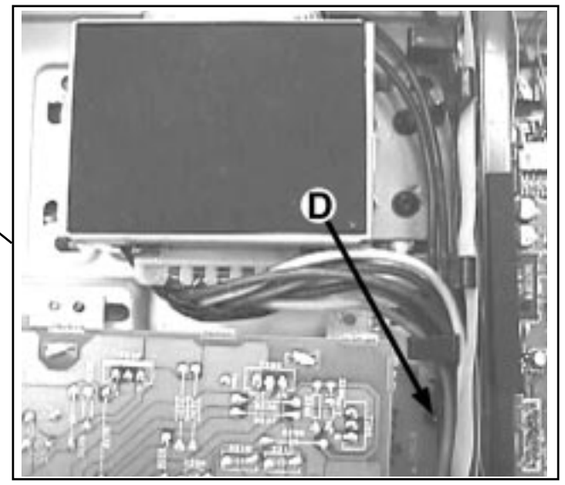


Figure 7

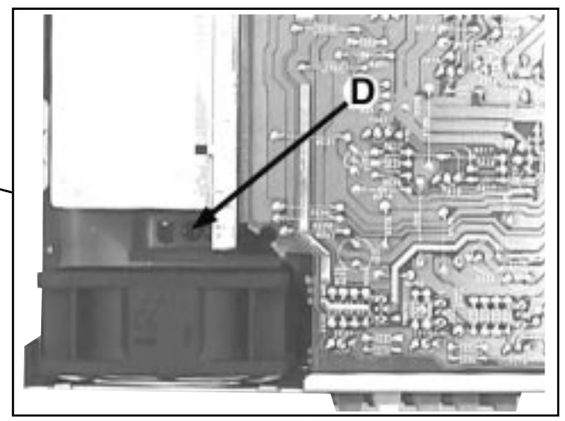


Figure 8

2-2

Dismantling of the DVD Module

1) Use a Flat Head screw driver to give a push in the direction as shown in Figure 9 to unlock the DVD Tray before sliding it out.

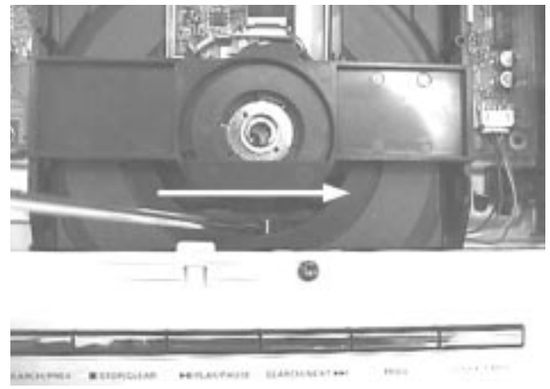


Figure 9

2) Slide out the DVD Tray and remove the Cover Tray DVD (pos 105) as shown in Figure 10.

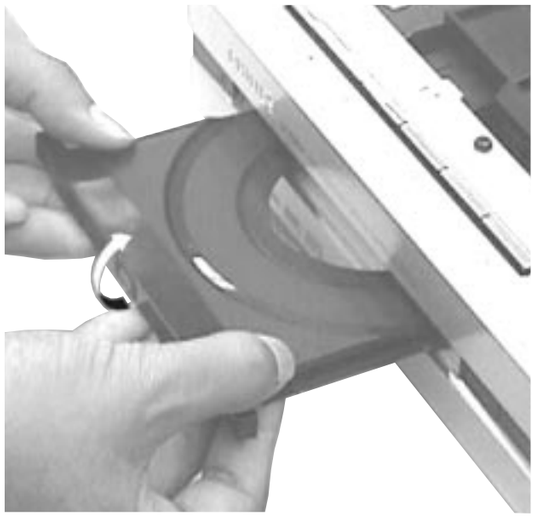


Figure 10

3) Slide out the DVD Tray fully and remove 6 screws J (see Figure 11) to loosen the DVD Module (pos 1109).
   - See Service position E

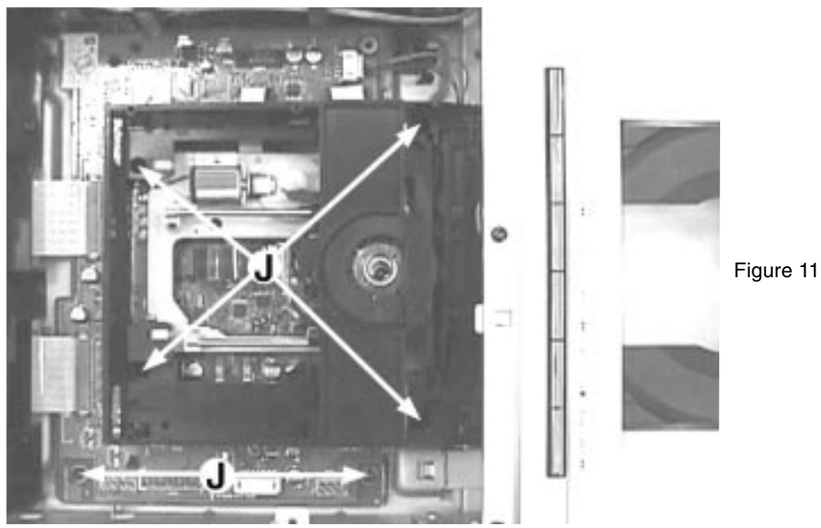


Figure 11

DISMANTLING INSTRUCTIONS

Dismantling of the Front Panel Assembly

1) Remove 7 screws H (see Figure 12 and Figure 13) and uncatch 2 catches H1 (see Figure 13) to loosen the Front Panel Assembly from the set.
   - 4 screws on top of the Front Panel Assembly
   - 3 screws and 2 catches H1 at the bottom of the Front Panel Assembly
   - See Service position F
2) Make sure to unplug the cable (if obstructed) before separate the Front Panel Assembly from the set (see Figure 14).

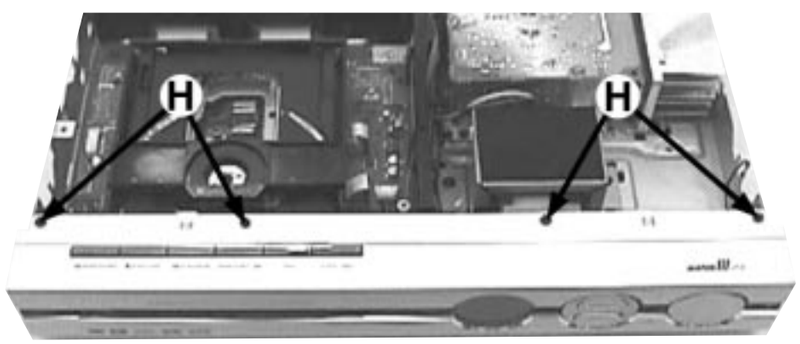


Figure 12

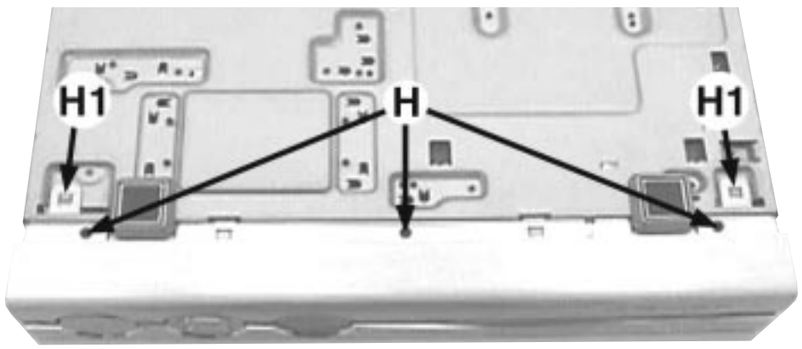


Figure 13

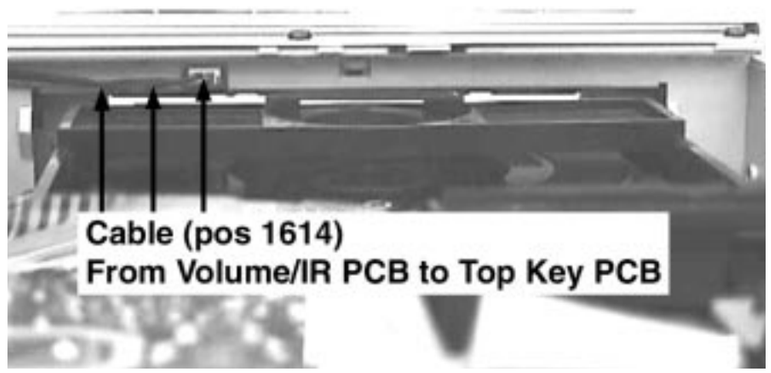


Figure 14

2-3

Dismantling of the Key & Control Boards

1) Remove 1 screw K (see Figure 15) to loosen the Headphone Board (pos 1105-D).
2) Remove 6 screws L (see Figure 15) to loosen the Volume& IR Board (pos 1105-C).
3) Remove 2 screws M (see Figure 16) to loosen the Power On/Off Board (pos 1105-A).
4) Remove 2 screws N (see Figure 16) to loosen the Bracket LED SACD (pos 109) and SACD LED Board (pos 1105-B).
5) Remove 3 screws P (for LX8000SA 2 screws only) and uncatch 2 catches P1 (see Figure 16) to loosen the Top Key Board (pos 1105-E).

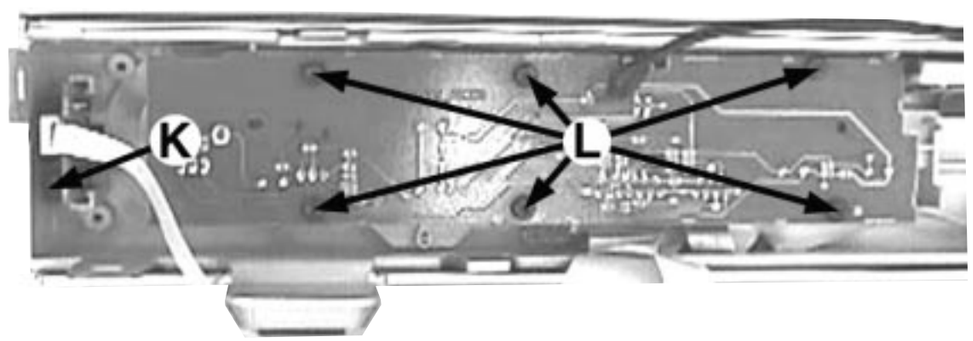


Figure 15

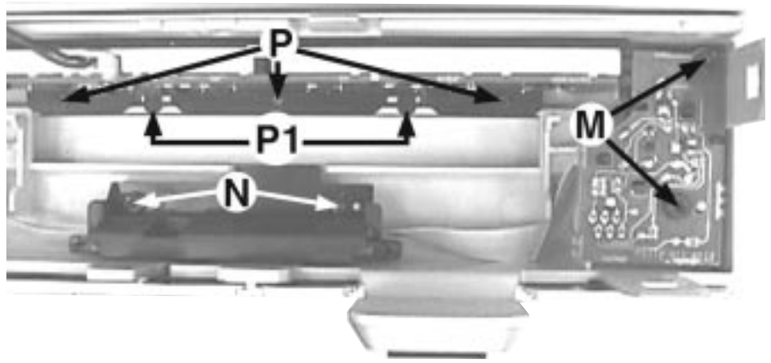


Figure 16

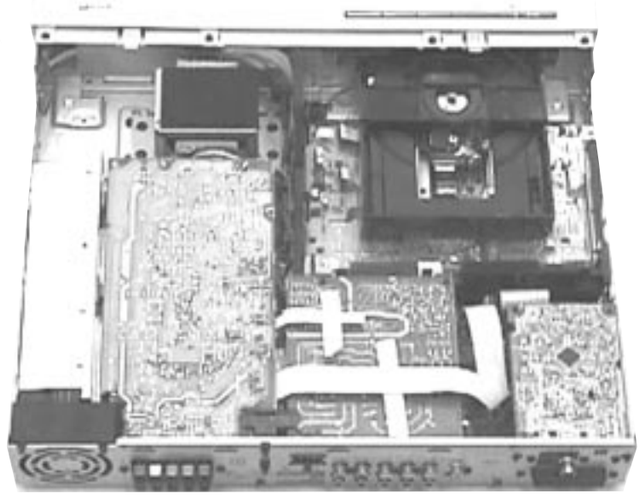
Repair Hints

1) During repair it is possible to disconnect the ECO6 Tuner Board completely unless the fault is suspected to be in that area. This will not affect the performance of the rest of the set.
2) The flex cables are very fragile, care should be taken not to damage them during repair. After repair, be very sure that the flex cables are inserted properly into the flex sockets before encasing, otherwise faults may occurs.

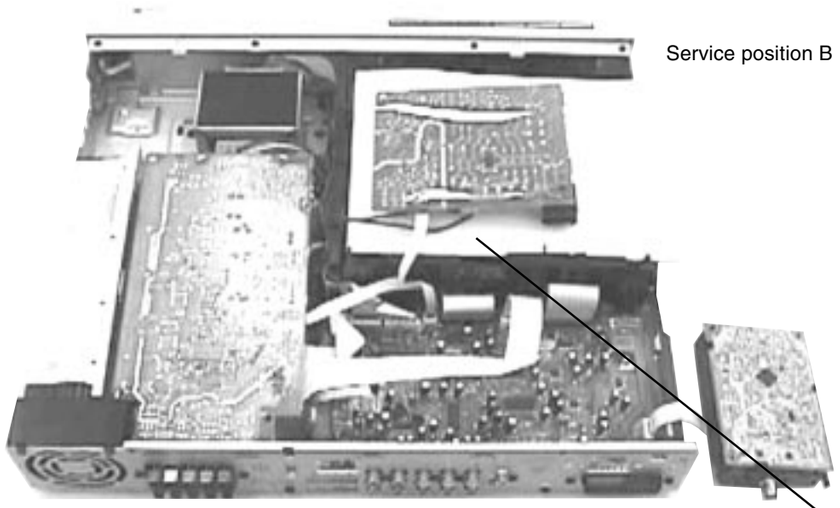
2-4

DISMANTLING INSTRUCTIONS

Service position A

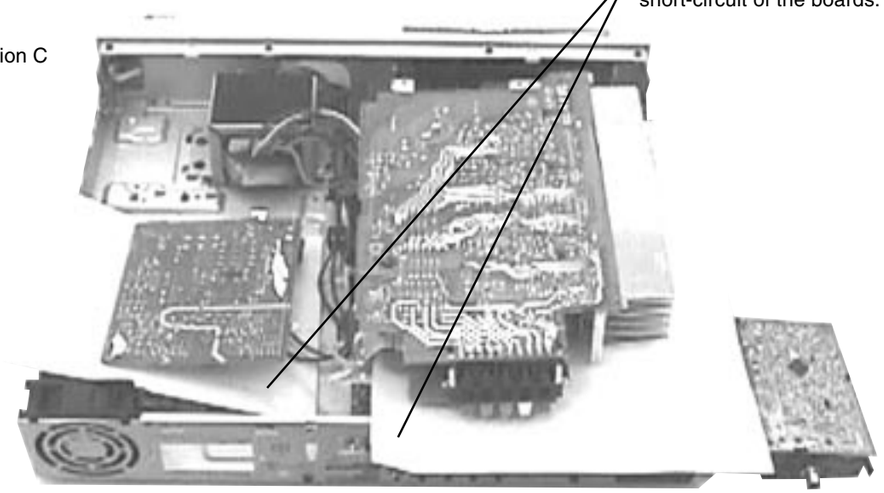


Service position B

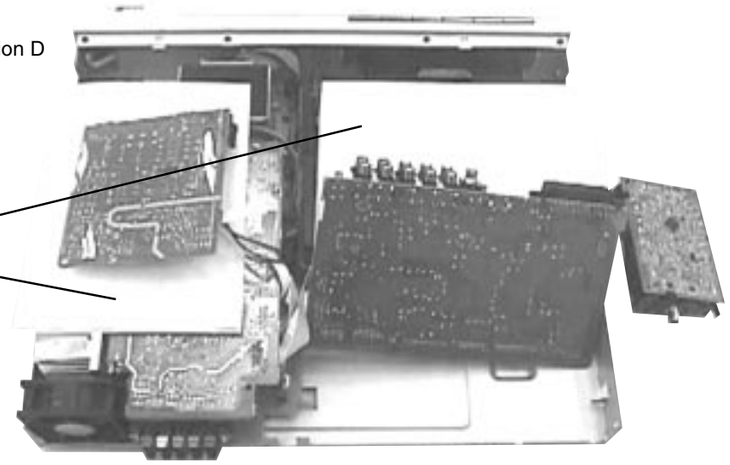


Use a insulation sheet to prevent any damaged or short-circuit of the boards.

Service position C

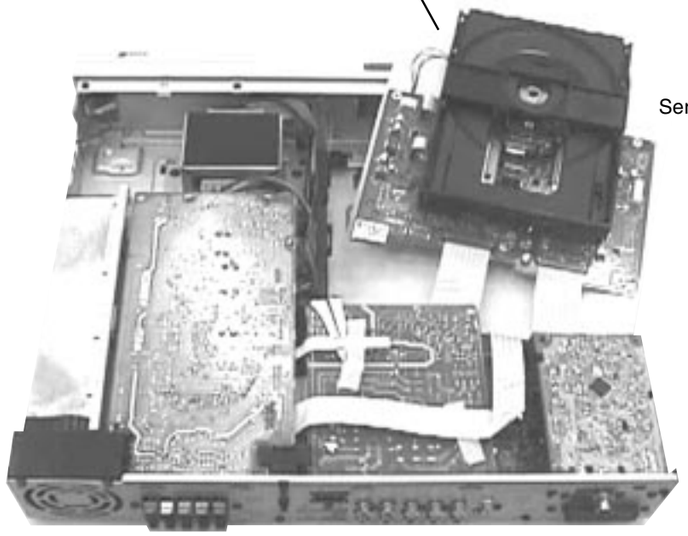


Service position D

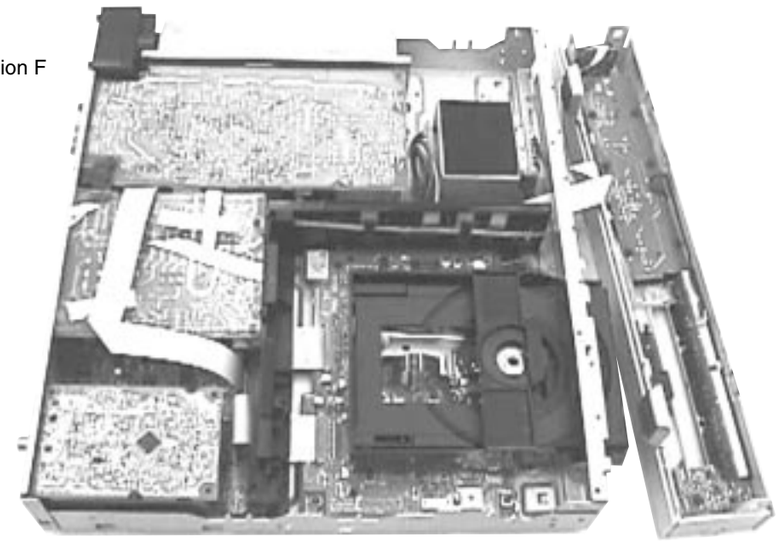


Use a insulation sheet to prevent any damaged or short-circuit of the boards.

Service position E

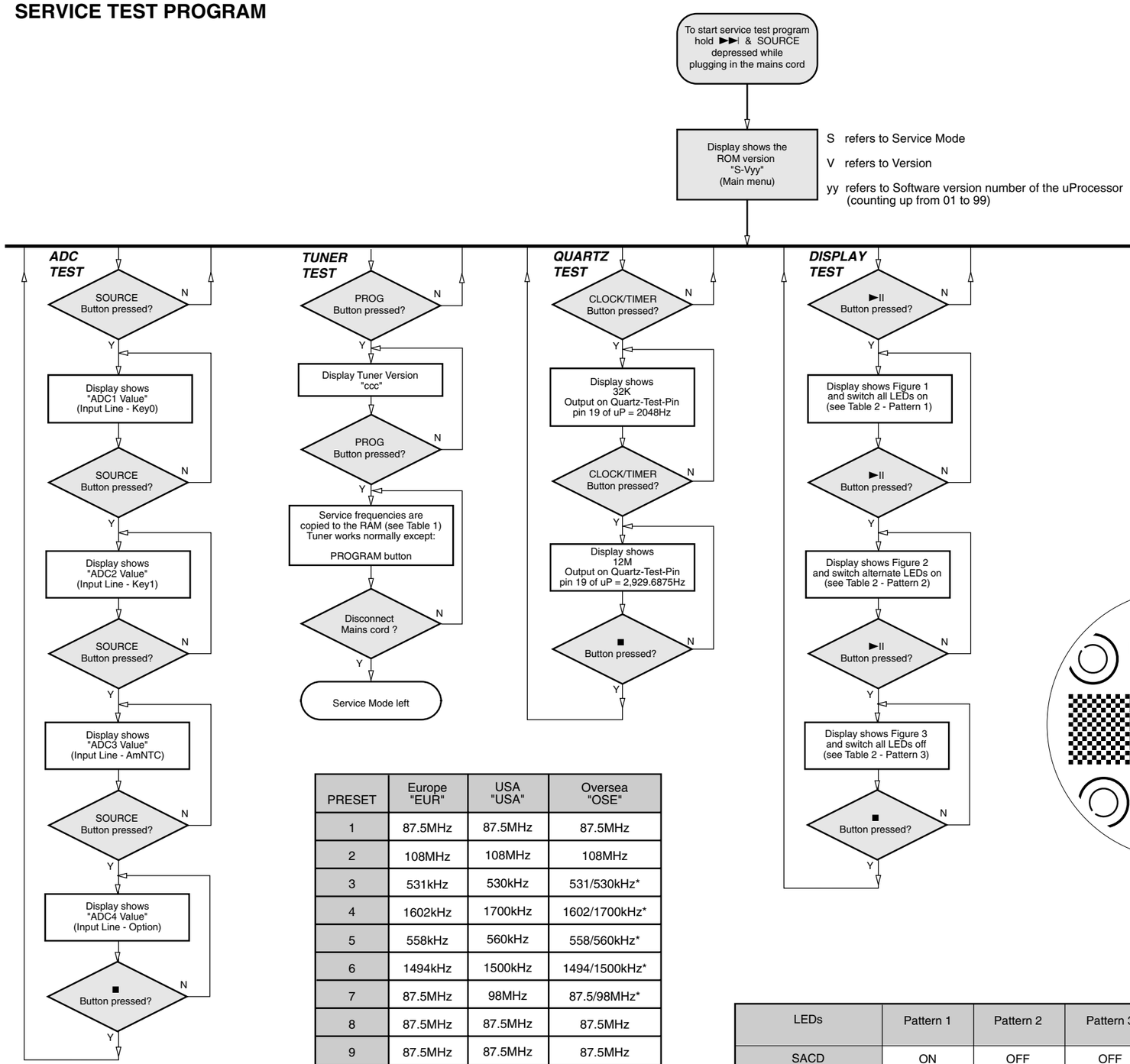


Service position F



3-1

SERVICE TEST PROGRAM


To start service test program hold ►►| & SOURCE depressed while plugging in the mains cord
Display shows the ROM version "S-Vyy" (Main menu)
S refers to Service Mode
V refers to Version
yy refers to Software version number of the uProcessor (counting up from 01 to 99)
ADC TEST
SOURCE Button pressed?
Display shows "ADC1 Value" (Input Line - Key0)
SOURCE Button pressed?
Display shows "ADC2 Value" (Input Line - Key1)
SOURCE Button pressed?
Display shows "ADC3 Value" (Input Line - AmNTC)
SOURCE Button pressed?
Display shows "ADC4 Value" (Input Line - Option)
■ Button pressed?
TUNER TEST
PROG Button pressed?
Display Tuner Version "ccc"
PROG Button pressed?
Service frequencies are copied to the RAM (see Table 1) Tuner works normally except:
PROGRAM button
Disconnect Mains cord ?
Service Mode left
QUARTZ TEST
CLOCK/TIMER Button pressed?
Display shows 32K Output on Quartz-Test-Pin pin 19 of uP = 2048Hz
CLOCK/TIMER Button pressed?
Display shows 12M Output on Quartz-Test-Pin pin 19 of uP = 2,929.6875Hz
■ Button pressed?
DISPLAY TEST
►II Button pressed?
Display shows Figure 1 and switch all LEDs on (see Table 2 - Pattern 1)
►II Button pressed?
Display shows Figure 2 and switch alternate LEDs on (see Table 2 - Pattern 2)
►II Button pressed?
Display shows Figure 3 and switch all LEDs off (see Table 2 - Pattern 3)
■ Button pressed?
Various other Tests

ADC Test is used for checking the ADC inputs to the microprocessor.

The display shows an ADC value between 0 and 255 for an input signal between 0 and 5V.

Note :
If the ADC value on the NTC line is below 69, the set will go to standby mode because the temperature is too high.

PRESET	Europe "EUR"	USA "USA"	Oversea "OSE"
1	87.5MHz	87.5MHz	87.5MHz
2	108MHz	108MHz	108MHz
3	531kHz	530kHz	531/530kHz*
4	1602kHz	1700kHz	1602/1700kHz*
5	558kHz	560kHz	558/560kHz*
6	1494kHz	1500kHz	1494/1500kHz*
7	87.5MHz	98MHz	87.5/98MHz*
8	87.5MHz	87.5MHz	87.5MHz
9	87.5MHz	87.5MHz	87.5MHz
10	87.5MHz	87.5MHz	87.5MHz
11	98MHz	87.5MHz	98/87.5MHz*

Table 1

Note: * Depending on the selected grid frequency (9 or 10kHz). By holding the "SOURCE" and "PROG" buttons depressed while switching on the Mains supply, the tuning grid frequency is toggled between 9kHz and 10kHz for the Oversea (/21) version.

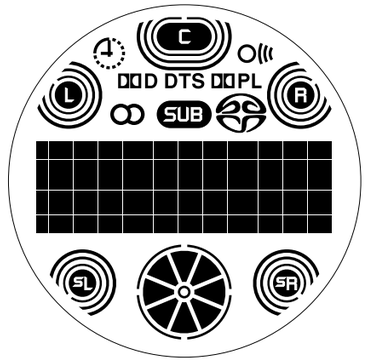


Figure 1

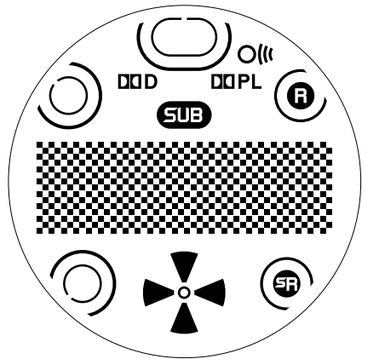


Figure 2

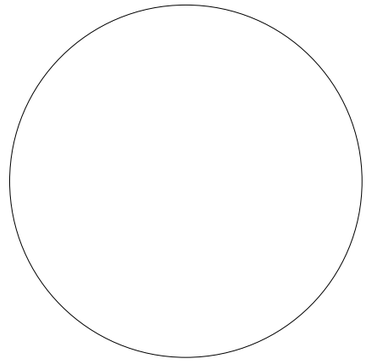


Figure 3

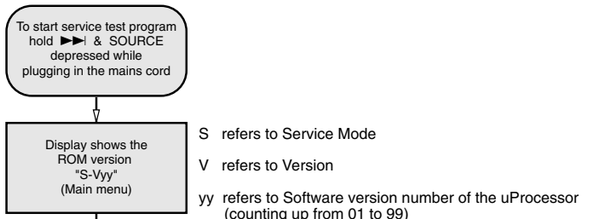
LEDs	Pattern 1	Pattern 2	Pattern 3
SACD	ON	OFF	OFF
STANDBY / ECO POWER	GREEN	RED	OFF
LCD BACKLIGHT	ON	ON	ON

Table 2

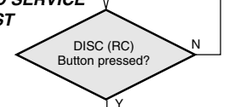
TEST	*Activated with*	*ACTION*
EEPROM TEST	►►| ■ to Exit	A test pattern will be sent to the EEPROM. "PASS" is displayed if the uProcessor read back the test pattern correctly, otherwise "FAIL" will be displayed.
EEPROM FORMAT TEST	|◄◄	Load default data. Display shows "NEW" for 1 second. ***Caution!*** ***All presets from the customer will be lost!!***
AUTO STANDBY TOGGLE	CENTER - (RC)	Pressing this button will toggle between the status "AUTO STANDBY ON" and "AUTO STANDBY OFF". The status will scroll once across the Display.
ROTARY ENCODER TEST	Rotary Volume Knob	Display shows value for 2 seconds. Values increases or decreases in steps of 1 until 0 (Volume Min.) or 40 (Volume Max.) is reached.
LEAVE SERVICE TEST PROGRAM	Disconnect mains cord	

3-2

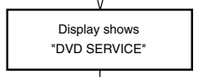
SERVICE TEST PROGRAM


To start service test program hold ►►I & SOURCE depressed while plugging in the mains cord
Display shows the ROM version "S-Vyy" (Main menu)
S refers to Service Mode
V refers to Version
yy refers to Software version number of the uProcessor (counting up from 01 to 99)

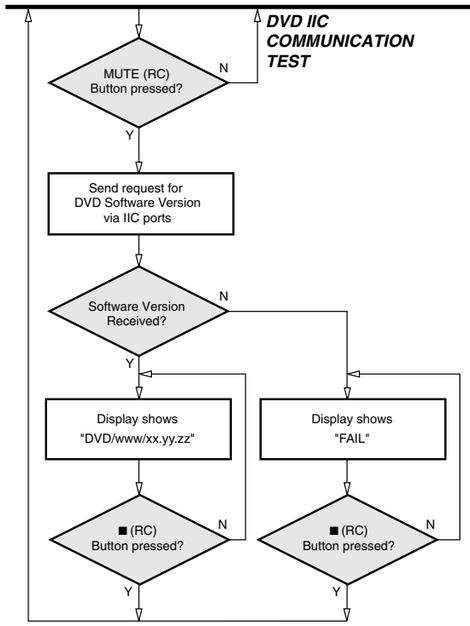
DVD SERVICE TEST



Remote Control (RC) must be in DVD source before start of any DVD Service Test.



DVD IIC COMMUNICATION TEST



DVD IIC Communication Test is used to test the IIC communication port between the DVD module and the microprocessor of the set.

www : refer to BEA Software version.
BEA = Back End Application (DVD Application Software).

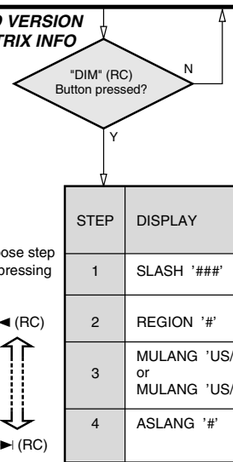
xx.yy.zz : refer to Basic Engine Software version.
Basic Engine = part of the DVD module controlling the servo.

ERROR CODE (Faulty Modules)

ERROR CODE	BASIC ENGINE PART	STI + PERIPHERALS
00	OK	OK
01	OK	Faulty
10	Faulty	OK
11	Faulty	Faulty

Table 3

DVD VERSION MATRIX INFO



STEP	DISPLAY	INFORMATION
1	SLASH 'x###'	Slash version number
2	REGION '#'	Region code setting (Number 1 - 6)
3	MULANG 'US/AP' or MULANG 'US/EU'	Menu language table : US/AP (USA-Asian Pacific language table) US/EU (USA-Europe language table)
4	ASLANG '#'	Audio/Subtitle language table (Number 1 - 4)
5	MULTI-CH 'YES' or MULTI-CH 'NO'	Available of multichannel decording
6	SMARTPIC 'YES' or SMARTPIC 'NO'	Available of smart picture
		Press ■ (RC) to exit

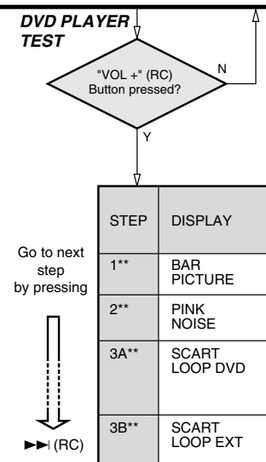
DVD Version Matrix Info is used to read the version matrix information that are stored/defined in the DVD module software.

ERROR CODE (Nucleaus)

ERROR CODE	NUCLEUS NUMBER	ERROR DESCRIPTION
0601	6	Calculated Checksum of FLASH is not correct
1101	11	I2C bus busy before start
1102	-	NVRAM access time-out
1103	-	No NVRAM acknowledge
1104	-	NVRAM reply time-out
1201	12	I2C bus busy
1202	-	Error sending I2C command to Slave
1203	-	Slave controller not responding
1204	-	Slave response is not correct
1301	13	Parity error receiving data from Basic Engine
1302	-	Parity error sending data to Basic Engine
1303	-	No communication with Basic Engine
1304	-	Comunication time-out with Basic Engine
1601	16	The SDRAM is faulty
5401	54	I2C bus busy
5402	-	Error sending I2C command to Scart Switch IC
5403	-	Scart switch IC not responding
5403	-	Scart switch IC response is not correct

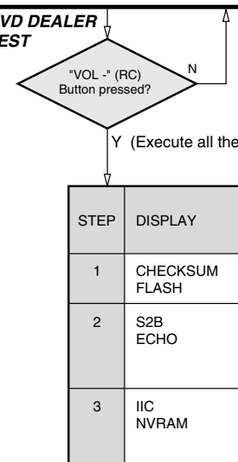
Table 4

DVD PLAYER TEST



STEP	DISPLAY	ACTION
1**	BAR PICTURE	Output of a test picture on all available video output devices.
2**	PINK NOISE	Output of noise on all channels available.
3A**	SCART LOOP DVD	Output of internally generated pink noise on all channels available, test picture (internally generated Colour Bar) on screen. Press I◄◄ (RC) to go to Step 3B.
3B**	SCART LOOP EXT	Output of internally generated pink noise on all channels available, test picture (external signal) on screen. Press ►►I (RC) to return to Step 3A.
4**	SINE SOUND	Sine sound output on all channels available. The sound can be stopped by pressing the "STOP"(RC) button.
5	ENG- "xx.yy.zz"	Returns the Software Version of the basic engine.
6	TRAY	The user can move the tray in and out by pressing "PLAY"(RC) or "RESUME"(RC) button. User can insert or remove a disc.
7	SLEDGE	The user can move the sledge in and out by pressing "PLAY"(RC) or "RESUME"(RC) button.
8**	MOTOR	The disc motor starts to run.
9**	FOCUS	Focus Test.
10**	RADIAL	Radial Test.
11	GROOVES	The laser spot jumps to another position. Press "PLAY"(RC) to jump to the next position. Press "RESUME"(RC) to jump to the previous jump position.
12	TRAY	The user can move the tray in and out by pressing "PLAY"(RC) or "RESUME"(RC) button. User can insert or remove a disc.
13	LO- "wwxxyyzz"	Reads out info from the error log (8 hex digits). Up to 16 errors can be stored in a buffer. The elements can be selected by pressing the "PLAY"(RC) or "RESUME"(RC) button. If the error log does not contain any fault codes, "LO-00000000" will be displayed.
14	ERROR "BITS xx"	Shows all error bits. Selects the error bit by pressing "PLAY"(RC) or "RESUME"(RC) button.
15	"aa-bbb cccc"	Runs the Dealer Test infinitely. The information returned from the module will be displayed. The loop number indicates the number of times the loop test has been performed. aa - Error Code Faulty Modules (see Table 3) bbb - Loop Number cccc - Error Code Nucleaus (see Table 4)
		Disconnect mains cord to exit the Service Test Program.

DVD DEALER TEST



STEP	DISPLAY	ACTION
1	CHECKSUM FLASH	Check the correctness of the checksum of the flash.
2	S2B ECHO	S2B Echo Mode. (This test is executed very fast and hence user will not be able to see this display message)
3	IIC NVRAM	Check the correctness of the IIC bus to the NVRAM. (This test need about 3 minutes to perform)
4	NVRAM WRITE	Check writing to the NVRAM.
5	SDRAM WRITE	Check writing to the SDRAM. (This test is executed very fast and hence user will not be able to see this display message)
6	ALL TEST FAIL or ALL TEST PASS	Result of all the tests.
		Disconnect mains cord to exit the Service Test Program.

DVD Dealer Test is used to check the flash RAM, the SDRAM, the DRAM, the NVRAM and the I2C communication.

When all the tests are passed, display shows "ALL TEST PASS". If at least one of the test fails, display shows "ALL TEST FAIL".

DVD Player Test is used to start several DVD specific tests.
At the end of the test, an error code "aa-bbb cccc" (see Step15) will be shown that indicates which module(s) failed.

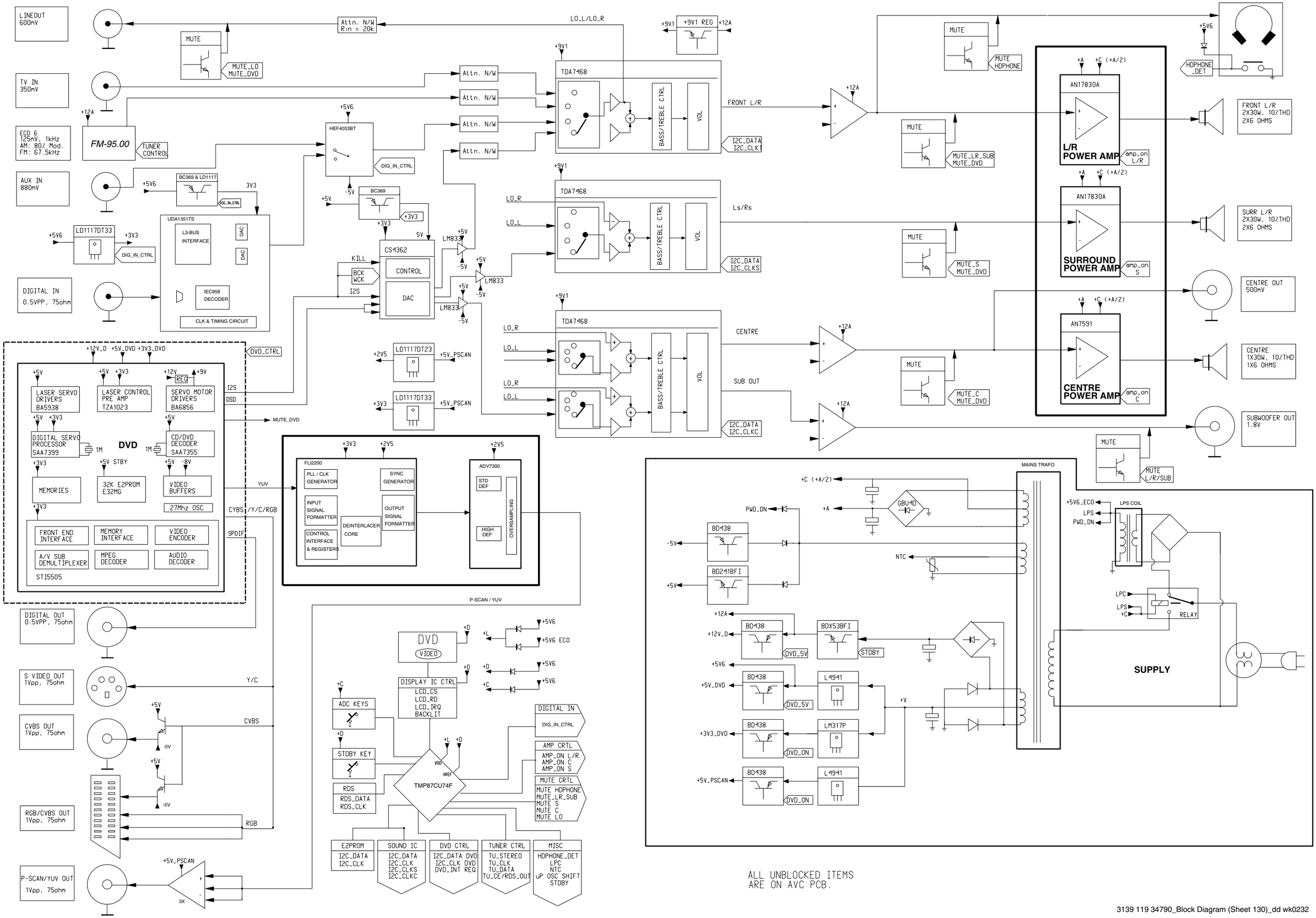
** User has to give a confirmation by triggering one of the following:
- If the test is OK, press "PLAY"(RC) button then follow by ►►I (RC) button to go to the next step.
- If the test is not OK, press "RESUME"(RC) button then follow by ►►I (RC) button to go to the next step.

Note : By pressing only the ►►I (RC) button to go to the next step without triggering a confirmation, the test will be assume as OK by default.

Equipment required to run the DVD Player Test:
- television set
- 6 audio speakers
- an external video source

4-1

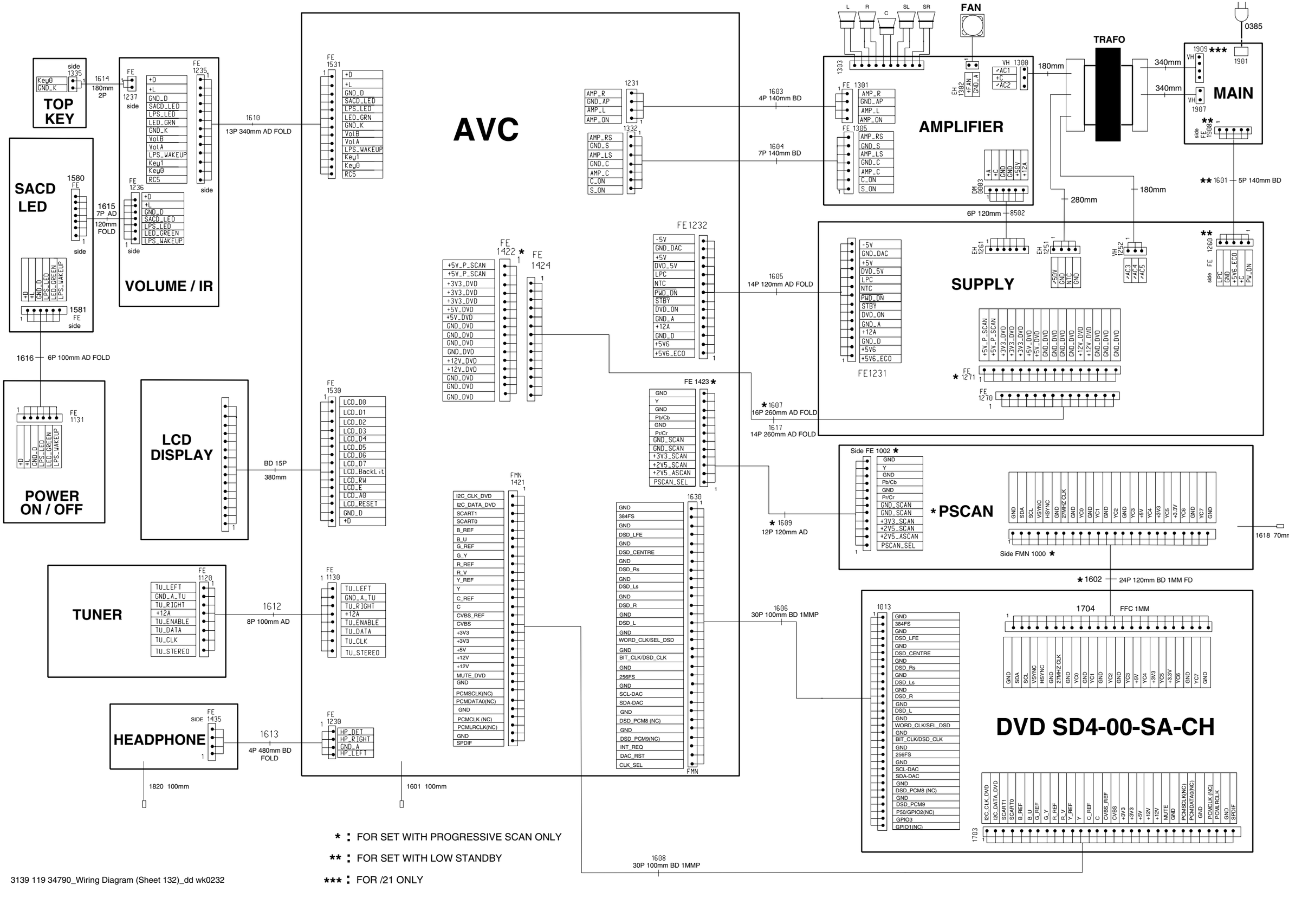
SET BLOCK DIAGRAM



3139 119 34790_Block Diagram (Sheet 130)_dd wk0232

5-1

SET WIRING DIAGRAM



* : FOR SET WITH PROGRESSIVE SCAN ONLY

** : FOR SET WITH LOW STANDBY

*** : FOR /21 ONLY

KEY & CONTROL BOARDS

TABLE OF CONTENTS

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LCD Module - Interface Pin Function 6-1
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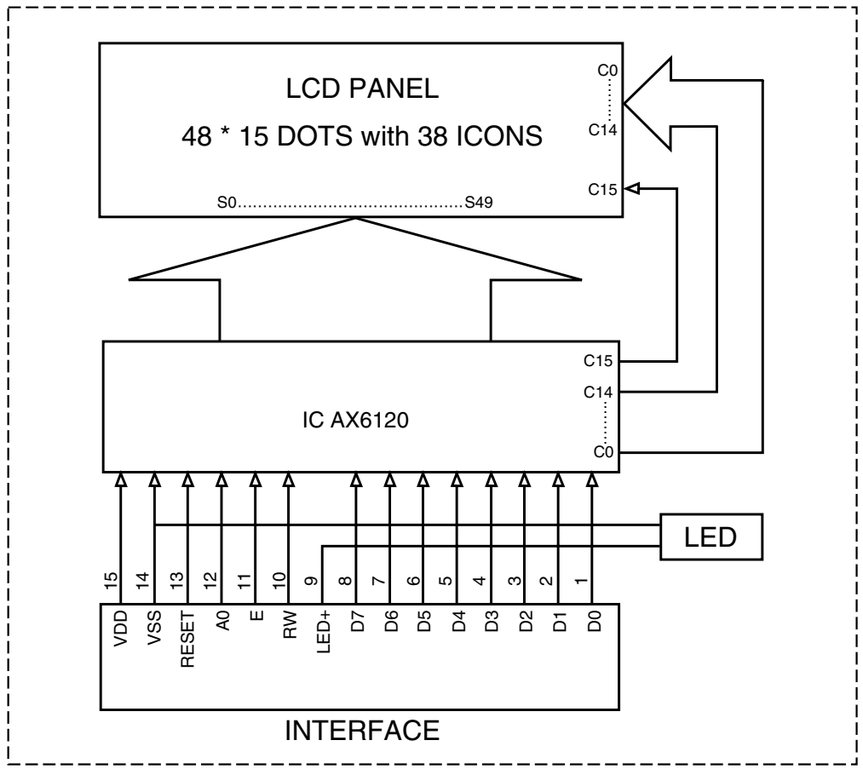
SACD LED Part - Layout & Circuit diagram 6-3
Volume & IR Part - Component & Chip layout 6-4
Volume & IR Part - Circuit diagram 6-5
Headphone Part - Layout & Circuit diagram 6-6
Power ON/OFF Part - Layout & Circuit diagram 6-6
Electrical parts list 6-7

LCD MODULE

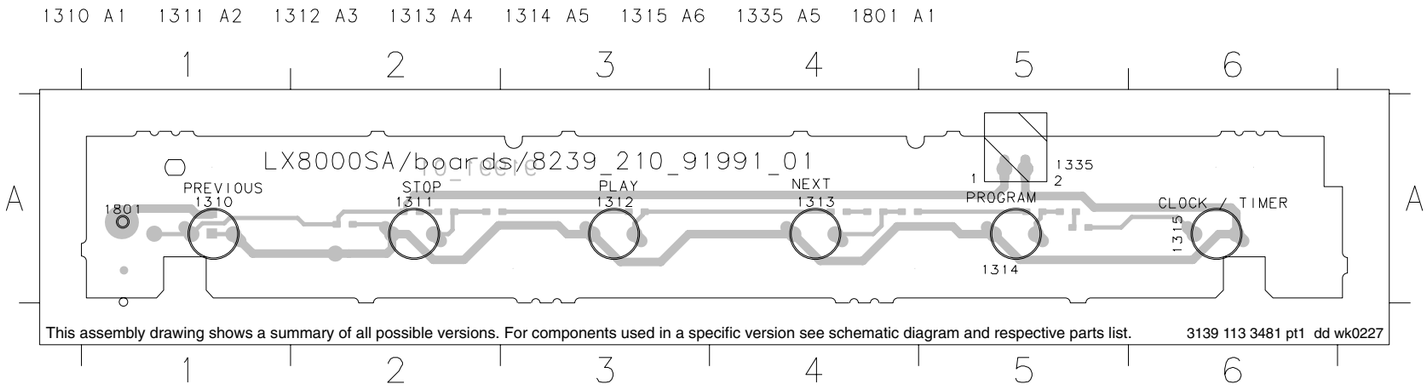
BLOCK DIAGRAM



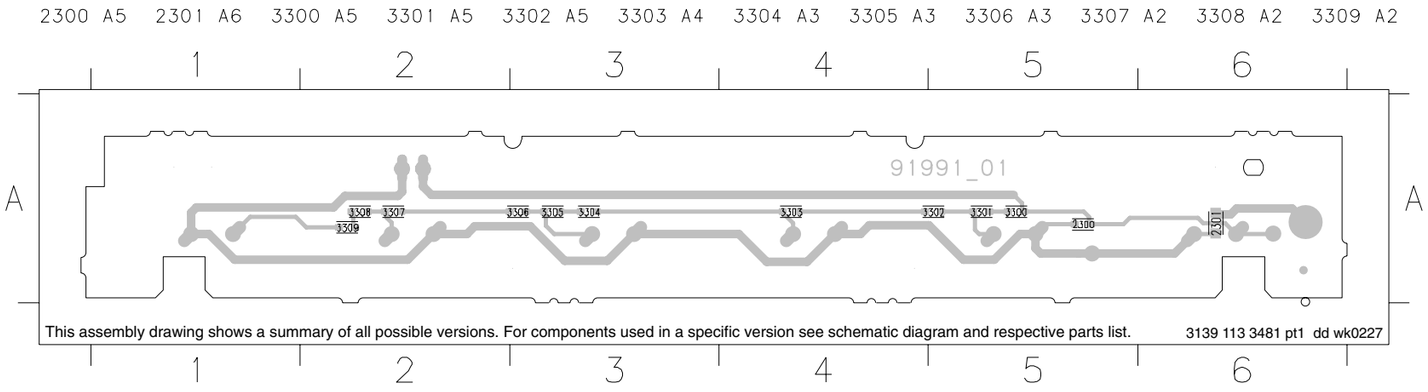
INTERFACE PIN FUNCTION

NO	SYMBOL	I/O	FUNCTION
1.	DB0	I/O	Data Bus
2.	DB1	I/O	Data Bus
3.	DB2	I/O	Data Bus
4.	DB3	I/O	Data Bus
5.	DB4	I/O	Data Bus
6.	DB5	I/O	Data Bus
7.	DB6	I/O	Data Bus
8.	DB7	I/O	Data Bus
9.	LED+	P	Power Supply for LED
10.	RW	I	Read/Write Execution Control
11.	E	I	Read/Write Start Signal
12.	A0	I	Register Select input
13.	RESET	I	Reset Input Pin
14.	VSS (LED-)	P	GND
15.	VDD	P	Power Supply for Logic

TOP KEY BOARD - COMPONENT LAYOUT

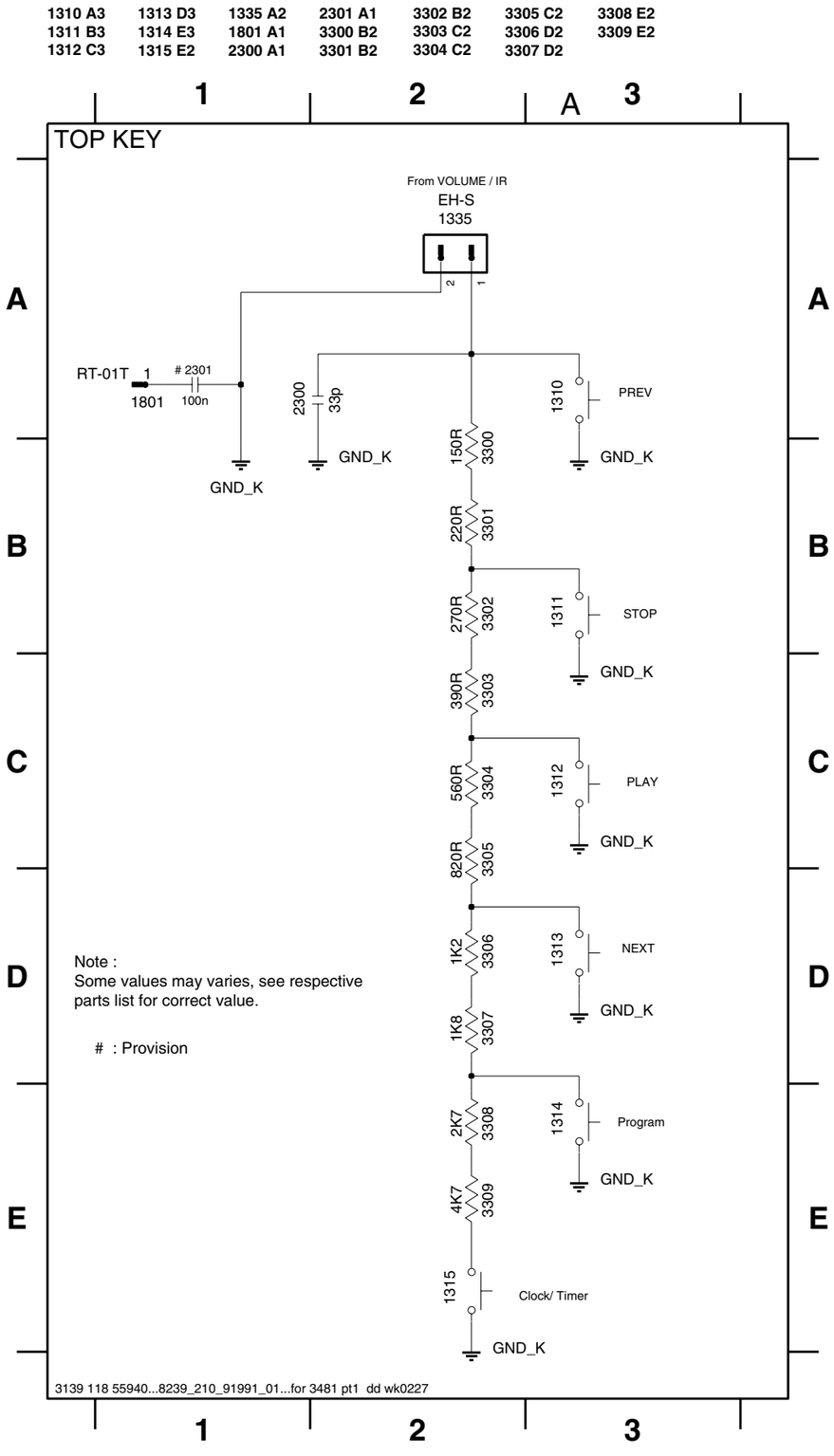

1310 A1 1311 A2 1312 A3 1313 A4 1314 A5 1315 A6 1335 A5 1801 A1
LX8000SA/boards/8239_210_91991_01
PREVIOUS 1310
STOP 1311
PLAY 1312
NEXT 1313
PROGRAM
1335
CLOCK / TIMER
1315
1314
1801
This assembly drawing shows a summary of all possible versions. For components used in a specific version see schematic diagram and respective parts list.
3139 113 3481 pt1 dd wk0227

TOP KEY BOARD - CHIP LAYOUT


2300 A5 2301 A6 3300 A5 3301 A5 3302 A5 3303 A4 3304 A3 3305 A3 3306 A3 3307 A2 3308 A2 3309 A2
91991_01
This assembly drawing shows a summary of all possible versions. For components used in a specific version see schematic diagram and respective parts list.
3139 113 3481 pt1 dd wk0227

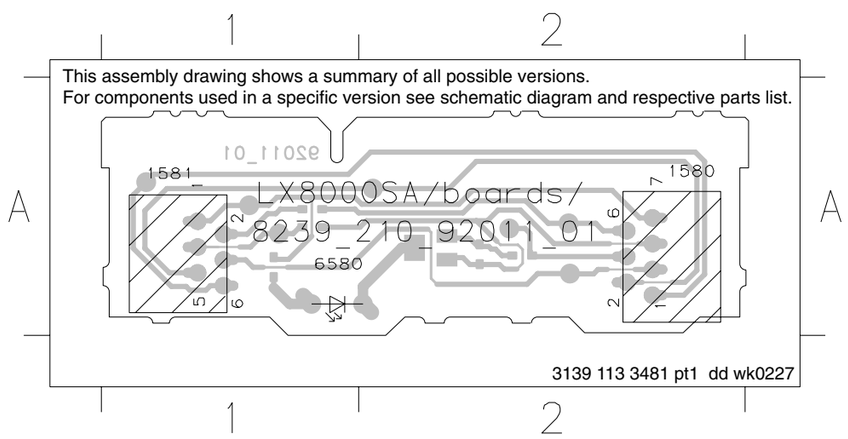
6-2

TOP KEY BOARD - CIRCUIT DIAGRAM



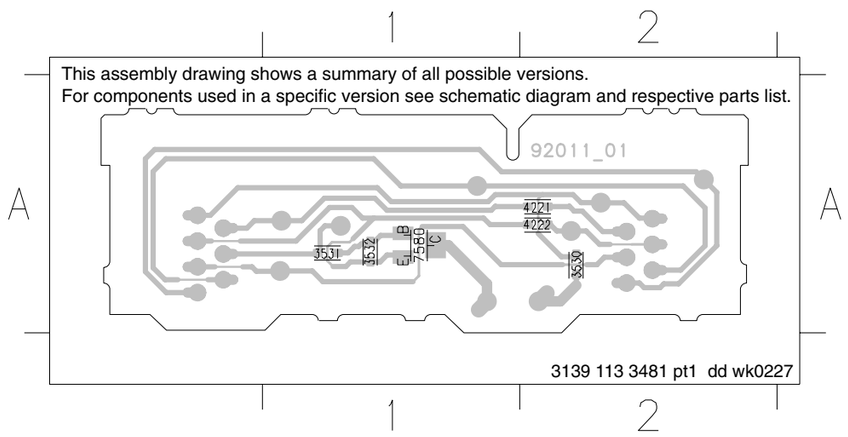
SACD LED BOARD - COMPONENT LAYOUT

1580 A2 1581 A1 6580 A1

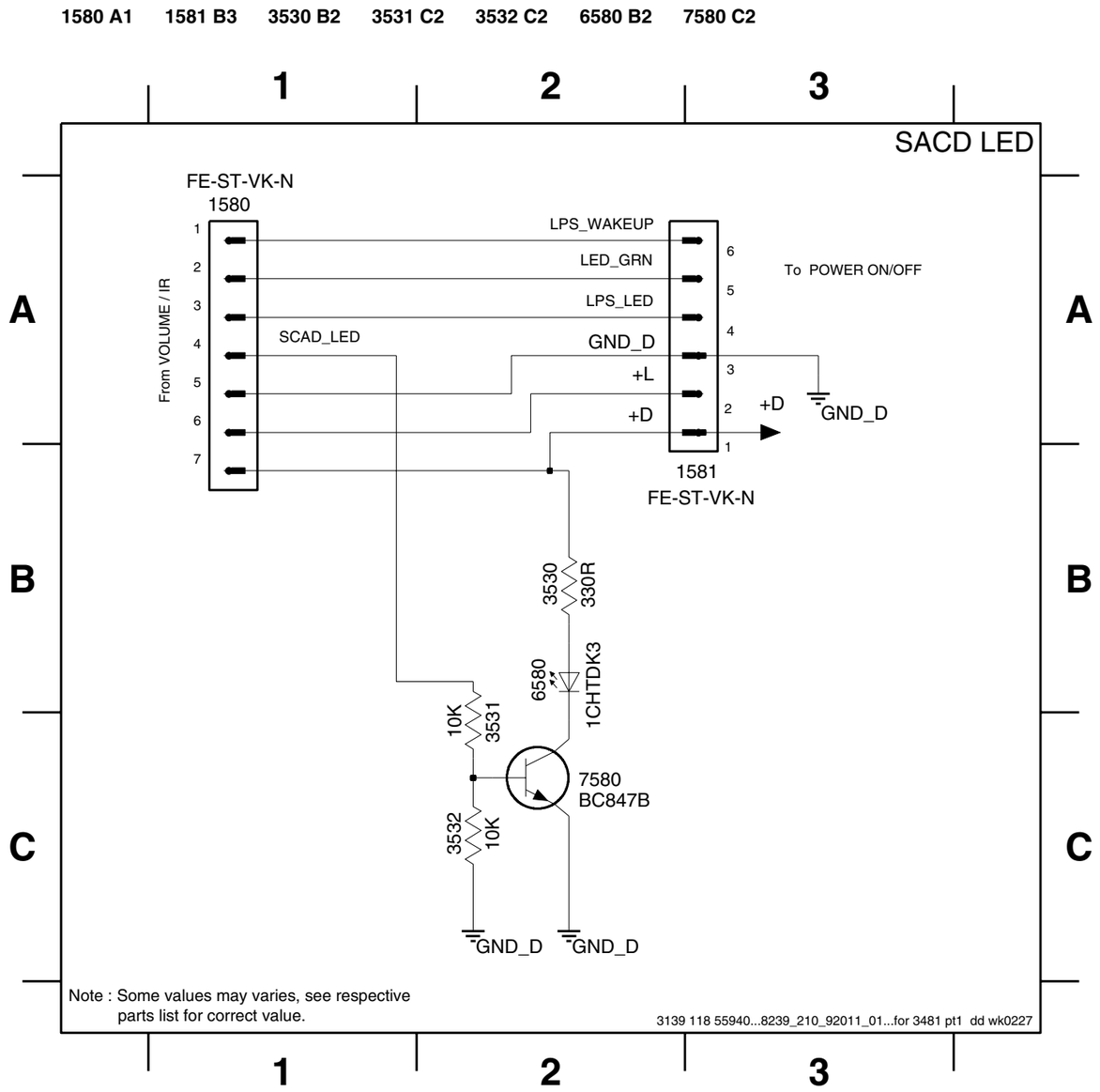


SACD LED BOARD - CHIP LAYOUT

3530 A2 3532 A1 4222 A2
3531 A1 4221 A2 7580 A1



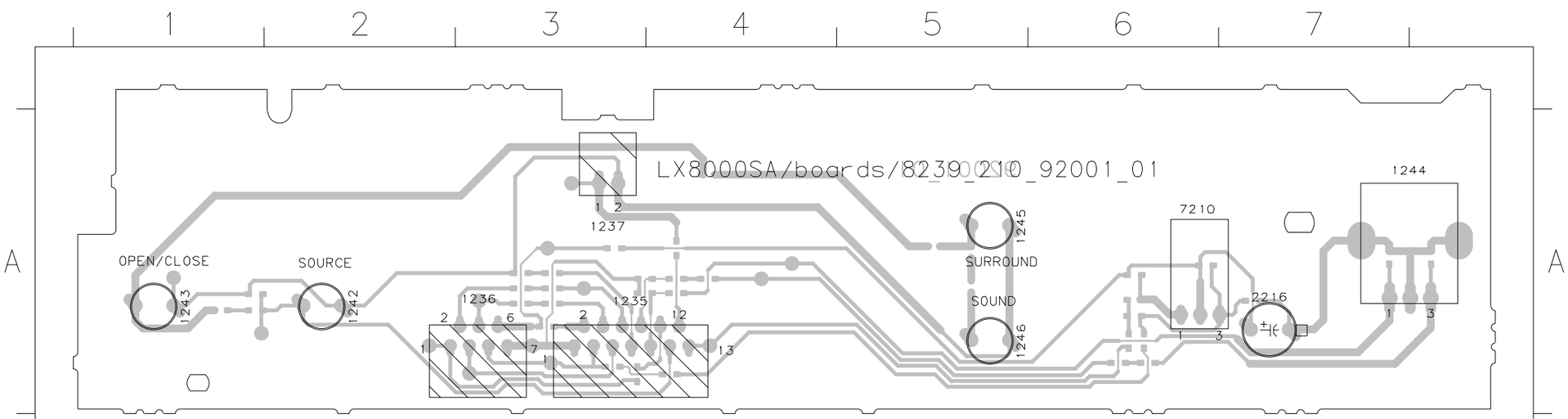
SACD LED BOARD - CIRCUIT DIAGRAM



6-4

VOLUME & IR BOARD - COMPONENT LAYOUT

1235 A3 1236 A3 1237 A3 1242 A2 1243 A1 1244 A7 1245 A5 1246 A5 2216 A7 7210 A6

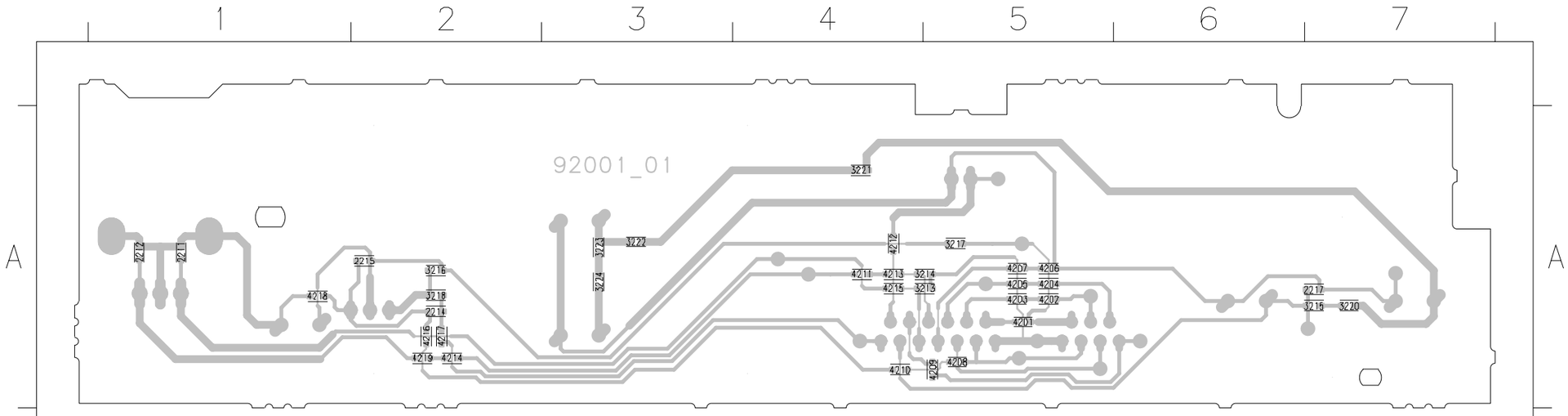


This assembly drawing shows a summary of all possible versions. For components used in a specific version see schematic diagram and respective parts list.

3139 113 3481 pt1 dd wk0227

VOLUME & IR BOARD - CHIP LAYOUT

2211 A1 2212 A1 2214 A2 2215 A2 2217 A7 3213 A5 3214 A5 3215 A7 3216 A2 3217 A5 3218 A2 3220 A7 3221 A4 3222 A3 3223 A3 3224 A3 4201 A5 4202 A5 4203 A5 4204 A5 4205 A5 4206 A5 4207 A5 4208 A5 4209 A5 4210 A4 4211 A4 4212 A4 4213 A4 4214 A2 4215 A4 4216 A2 4217 A2 4218 A1 4219 A2



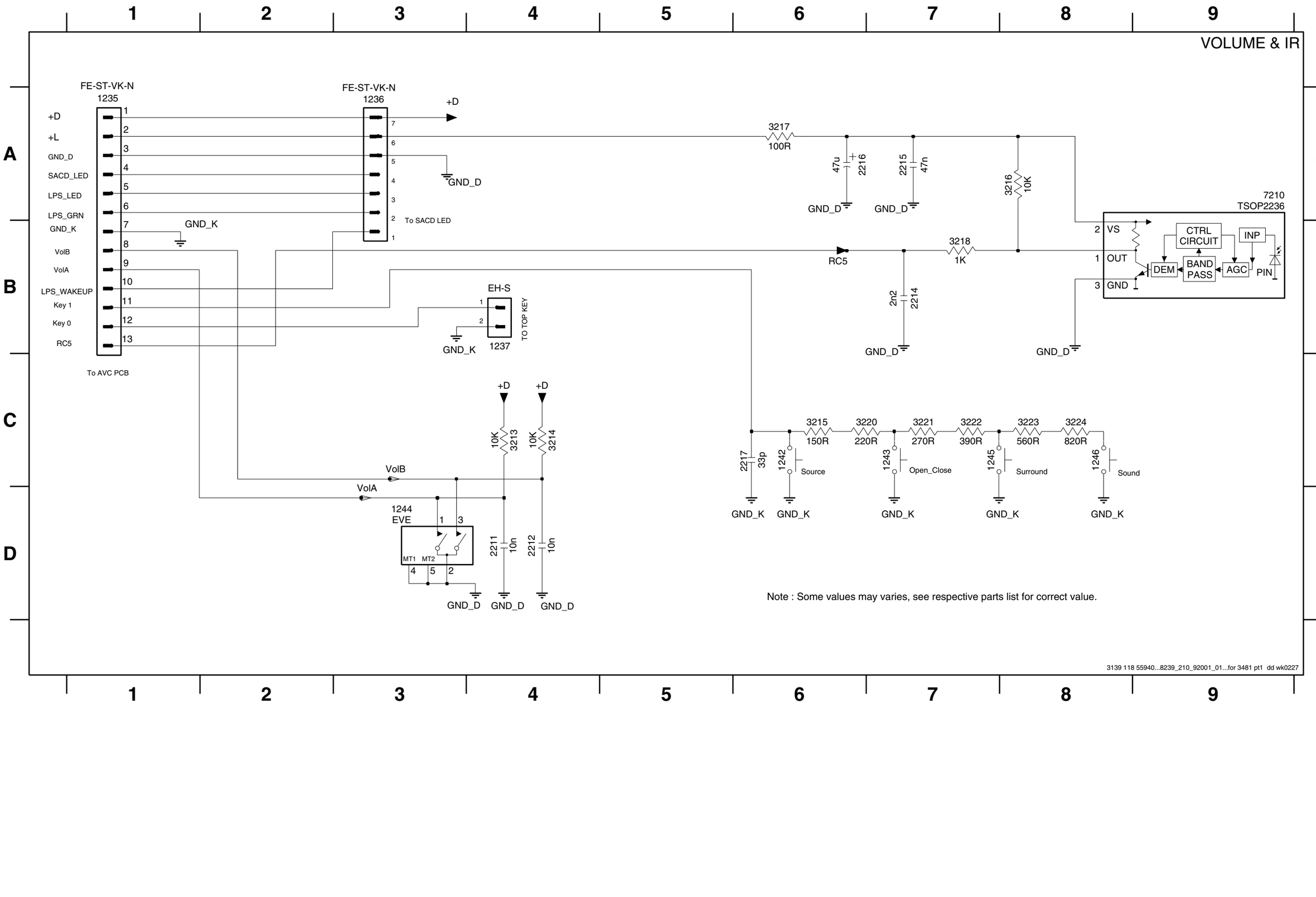
This assembly drawing shows a summary of all possible versions. For components used in a specific version see schematic diagram and respective parts list.

3139 113 3481 pt1 dd wk0227

6-5

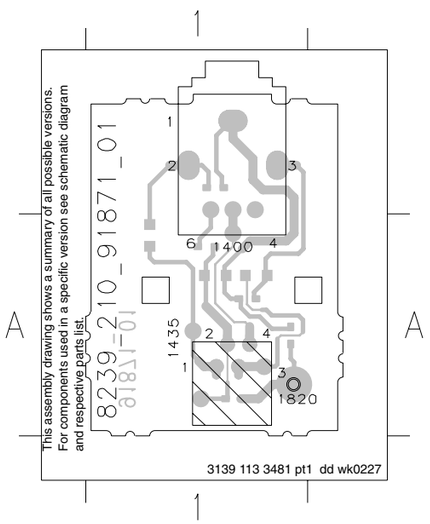
VOLUME & IR BOARD - CIRCUIT DIAGRAM

1235 A1 | 1236 A3 | 1237 C4 | 1242 C6 | 1243 C7 | 1244 D3 | 1245 C7 | 1246 C8 | 2211 D4 | 2212 D4 | 2214 B7 | 2215 A7 | 2216 A6 | 2217 C6 | 3213 C4 | 3214 C4 | 3215 C6 | 3216 A8 | 3217 A6 | 3218 B7 | 3220 C7 | 3221 C7 | 3222 C7 | 3223 C8 | 3224 C8 | 7210 A9



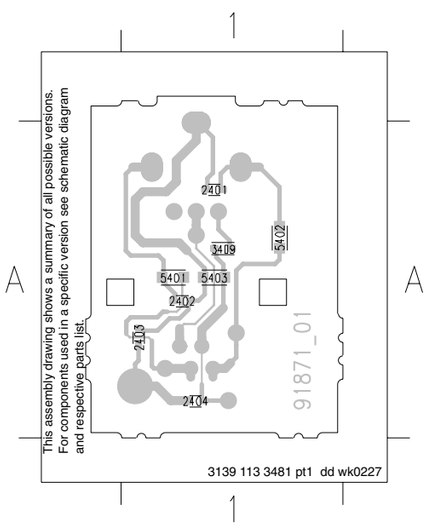
HEADPHONE BOARD - COMPONENT LAYOUT

1400 A1 1435 A1 1820 A1



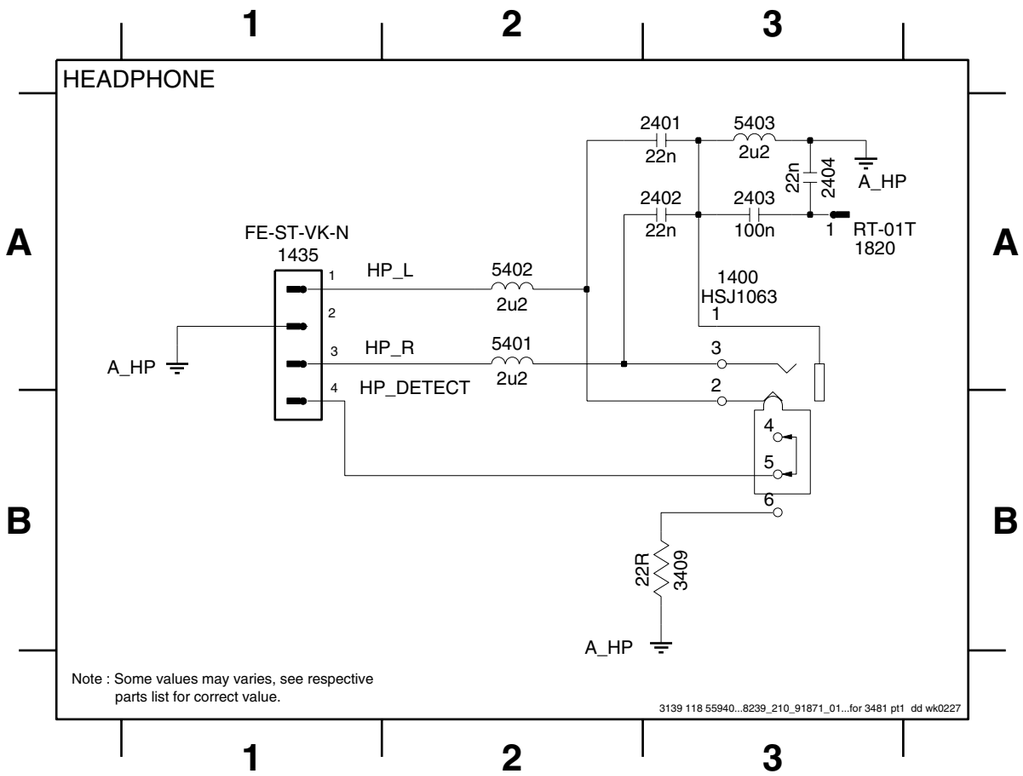
HEADPHONE BOARD - CHIP LAYOUT

2401 A1 2404 A1 5402 A1
2402 A1 3409 A1 5403 A1
2403 A1 5401 A1



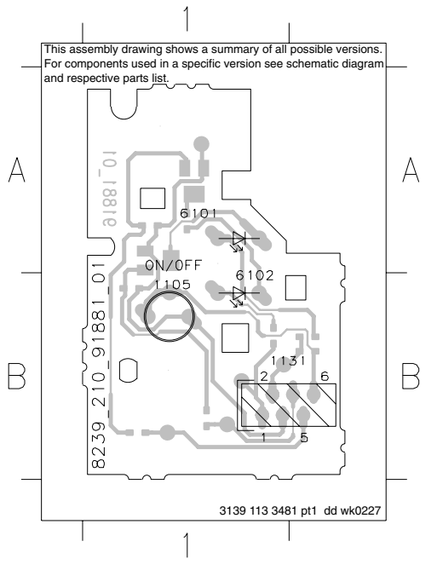
HEADPHONE BOARD - CIRCUIT DIAGRAM

1400 A3 1820 A3 2402 A3 2404 A3 5401 A2 5403 A3
1435 A1 2401 A3 2403 A3 3409 B3 5402 A2



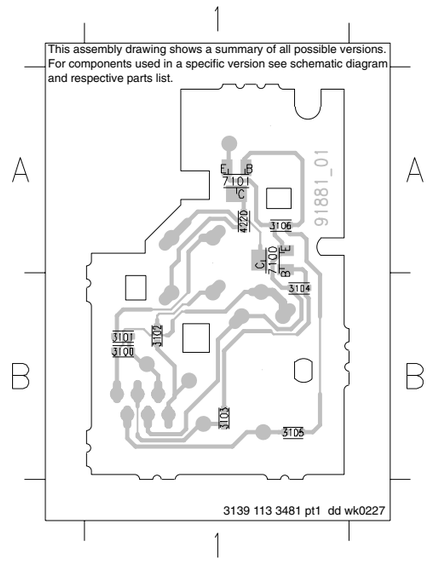
POWER ON/OFF BOARD - COMPONENT LAYOUT

1105 B1 6101 A1
1131 B1 6102 B1



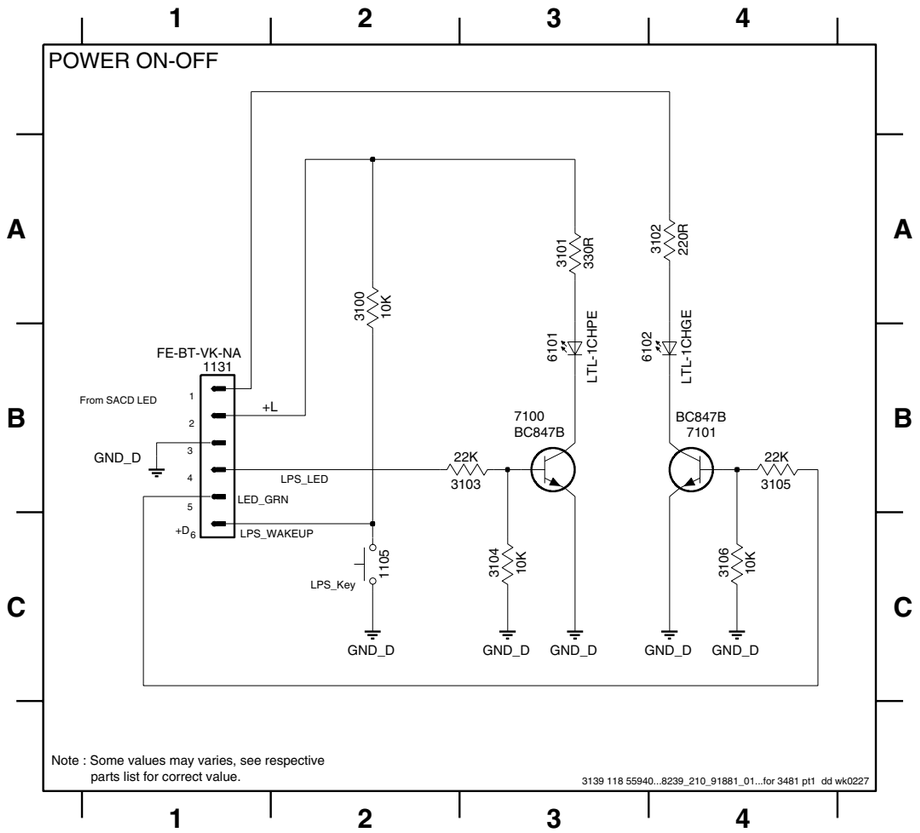
POWER ON/OFF BOARD - CHIP LAYOUT

3100 B1 3104 B1 7100 A1
3101 B1 3105 B1 7101 A1
3102 B1 3106 A1
3103 B1 4220 A1



POWER ON/OFF BOARD - CIRCUIT DIAGRAM

1105 C2 3100 A2 3102 A4 3104 C3 3106 C4 6102 B4 7101 B4
1131 B1 3101 A3 3103 B3 3105 B4 6101 B3 7100 B3



ELECTRICAL PARTS LIST - KEY & CONTROL BOARDS

MISCELLANEOUS

1105	4822 276 13775	Tact Switch
1131	4822 267 10731	Flex Connector 6P
1235	4822 267 10756	Flex Connector 13P
1236	4822 267 10956	Flex Connector 7P
1242	4822 276 13775	Tact Switch
1243	4822 276 13775	Tact Switch
1244	2422 129 16836	Rotary Encoder 12P
1245	4822 276 13775	Tact Switch
1246	4822 276 13775	Tact Switch
1310	4822 276 13775	Tact Switch
1311	4822 276 13775	Tact Switch
1312	4822 276 13775	Tact Switch
1313	4822 276 13775	Tact Switch
1314	4822 276 13775	Tact Switch
1315	4822 276 13775	Tact Switch
1400	2422 026 05332	Headphone Socket
1435	4822 265 11183	Flex Connector 4P
1580	4822 267 10956	Flex Connector 7P
1581	4822 265 11207	Flex Connector 6P

CAPACITORS

2211	5322 126 11583	10nF 10% 50V
2212	5322 126 11583	10nF 10% 50V
2214	2238 786 11554	2,2nF 5% 16V
2215	3198 017 34730	47nF 16V
2216	4822 124 81286	47uF 20% 16V
2217	2222 867 15339	33pF 5% 50V
2300	2222 867 15339	33pF 5% 50V
2401	3198 017 42230	22nF 50V
2402	3198 017 42230	22nF 50V
2403	2238 586 59812	100nF +80/-20% 50V
2404	3198 017 42230	22nF 50V

RESISTORS

3100	4822 051 30103	10k 5% 0,062W
3101	4822 051 30331	330R 5% 0,062W
3102	4822 051 30221	220R 5% 0,062W
3103	4822 051 30223	22k 5% 0,062W
3104	4822 051 30103	10k 5% 0,062W
3105	4822 051 30223	22k 5% 0,062W
3106	4822 051 30103	10k 5% 0,062W
3213	4822 051 30103	10k 5% 0,062W
3214	4822 051 30103	10k 5% 0,062W
3215	4822 051 30151	150R 5% 0,062W
3216	4822 051 30103	10k 5% 0,062W
3217	4822 051 30101	100R 5% 0,062W
3218	4822 051 30102	1k 5% 0,062W
3220	4822 051 30221	220R 5% 0,062W
3221	4822 051 30271	270R 5% 0,062W
3222	4822 051 30391	390R 5% 0,062W
3223	4822 051 30561	560R 5% 0,062W
3224	4822 117 12968	820R 5% 0,62W
3300	4822 051 30151	150R 5% 0,062W
3301	4822 051 30221	220R 5% 0,062W
3302	4822 051 30271	270R 5% 0,062W
3303	4822 051 30391	390R 5% 0,062W
3304	4822 051 30561	560R 5% 0,062W
3305	4822 117 12968	820R 5% 0,62W
3306	4822 117 11817	1k2 1% 1/16W
3307	4822 117 12903	1k8 1% 0,063W
3308	4822 051 30272	2k7 5% 0,062W
3309	4822 051 30472	4k7 5% 0,062W
3409	4822 117 12139	22R 5% 0,062W
3530	4822 051 30331	330R 5% 0,062W
3531	4822 051 30103	10k 5% 0,062W
3532	4822 051 30103	10k 5% 0,062W
4201	4822 051 30008	0R Jumper 0603
4202	4822 051 30008	0R Jumper 0603
4203	4822 051 30008	0R Jumper 0603
4204	4822 051 30008	0R Jumper 0603
4205	4822 051 30008	0R Jumper 0603
4206	4822 051 30008	0R Jumper 0603
4207	4822 051 30008	0R Jumper 0603
4208	4822 051 30008	0R Jumper 0603
4209	4822 051 30008	0R Jumper 0603
4210	4822 051 30008	0R Jumper 0603
4211	4822 051 30008	0R Jumper 0603
4212	4822 051 30008	0R Jumper 0603
4213	4822 051 30008	0R Jumper 0603
4214	4822 051 30008	0R Jumper 0603
4215	4822 051 30008	0R Jumper 0603
4216	4822 051 30008	0R Jumper 0603
4217	4822 051 30008	0R Jumper 0603
4218	4822 051 30008	0R Jumper 0603
4219	4822 051 30008	0R Jumper 0603
4220	4822 051 30008	0R Jumper 0603
4221	4822 051 30008	0R Jumper 0603
4222	4822 051 30008	0R Jumper 0603

COILS & FILTERS

5401	4822 157 10586	Coil 2,2uH 10%
5402	4822 157 10586	Coil 2,2uH 10%
5403	4822 157 10586	Coil 2,2uH 10%

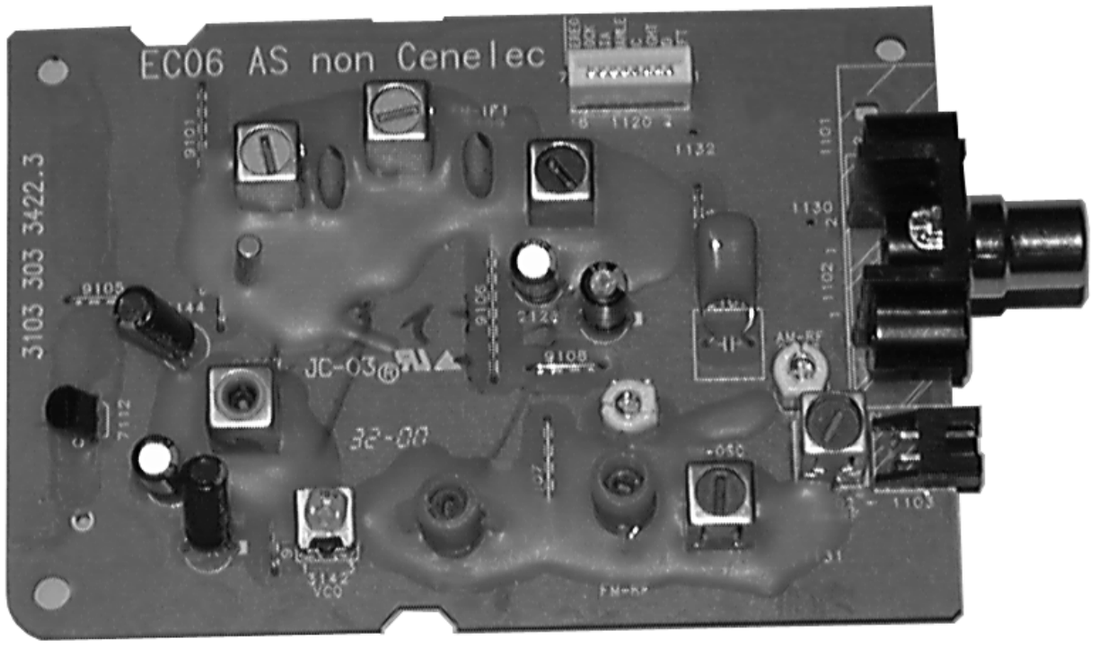
DIODES

6101	4822 130 82978	LED VS LTL-1CHPE
6102	4822 130 10791	LED VS LTL-1CHGE
6580	9322 185 23676	LED VS LTL-1CHTDK3

TRANSISTORS & INTEGRATED CIRCUITS

7100	5322 130 60159	BC847B
7101	5322 130 60159	BC847B
7210	9322 155 82667	IR Receiver TSOP2236ZC1
7580	5322 130 60159	BC847B

Note : Only the parts mentioned in this list are normal service spare parts.



ECO6 Tuner Board

version: ***SYSTEMS non-CENELEC***

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Schematic Diagram.....7A-2
Component Layout.....7A-3
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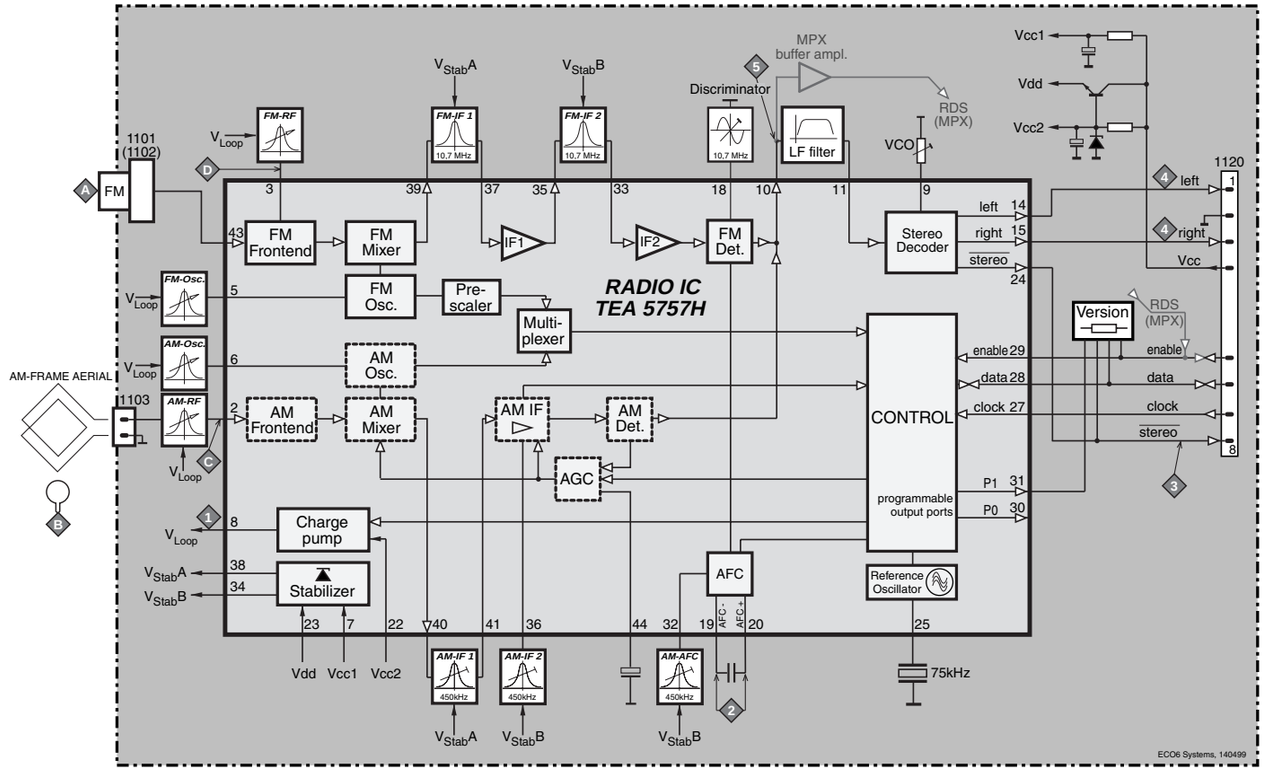
Electrical Partslist.....7A-4

7A-1

BLOCK DIAGRAM

TUNER BOARD
ECO 6 Systems



7A-2

TUNER BOARD ECO6 / SYSTEMS NON CENELEC

VERSION PROGRAMMING COMPONENTS

VERSION	6120	3156	3157	3170	7111
/00 /02 FM/MW/LW	☒				
/00 /02 FM/MW		☒	☒		☒
/01 FM/MW		☒	☒		☒
/14 FM-OIRT/MW	☒				☒
/17 FM/AM	☒				☒
/06 FM-Japan/AM		☒	☒	☒	☒

☒ component mounted

LEGEND

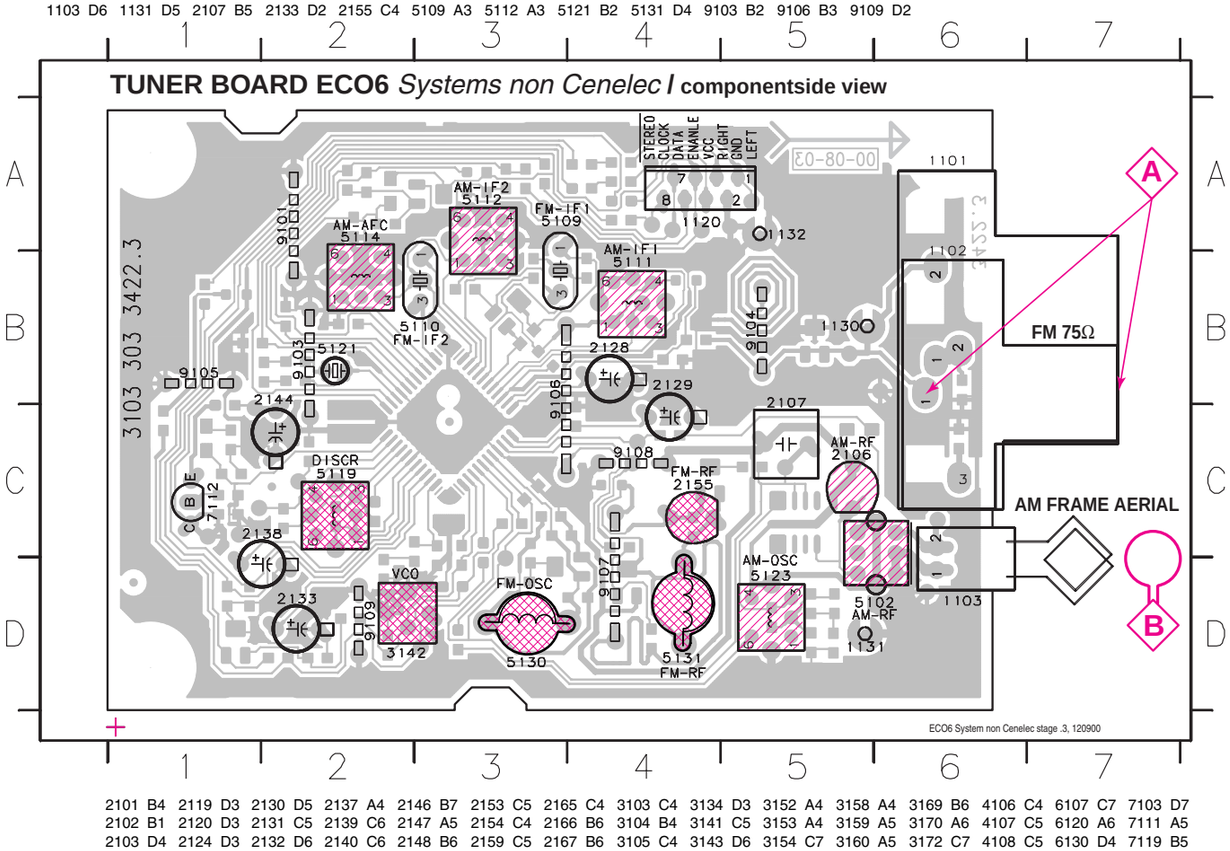
ⓟ...for provision only
USA ... for USA version only
E-EU ... for East European version only
J ... for Japanese version only

EVM
...V FM mode stereo
[...V] MW mode
[...V] LW mode
voltages measured while set is tuned to a strong transmitter

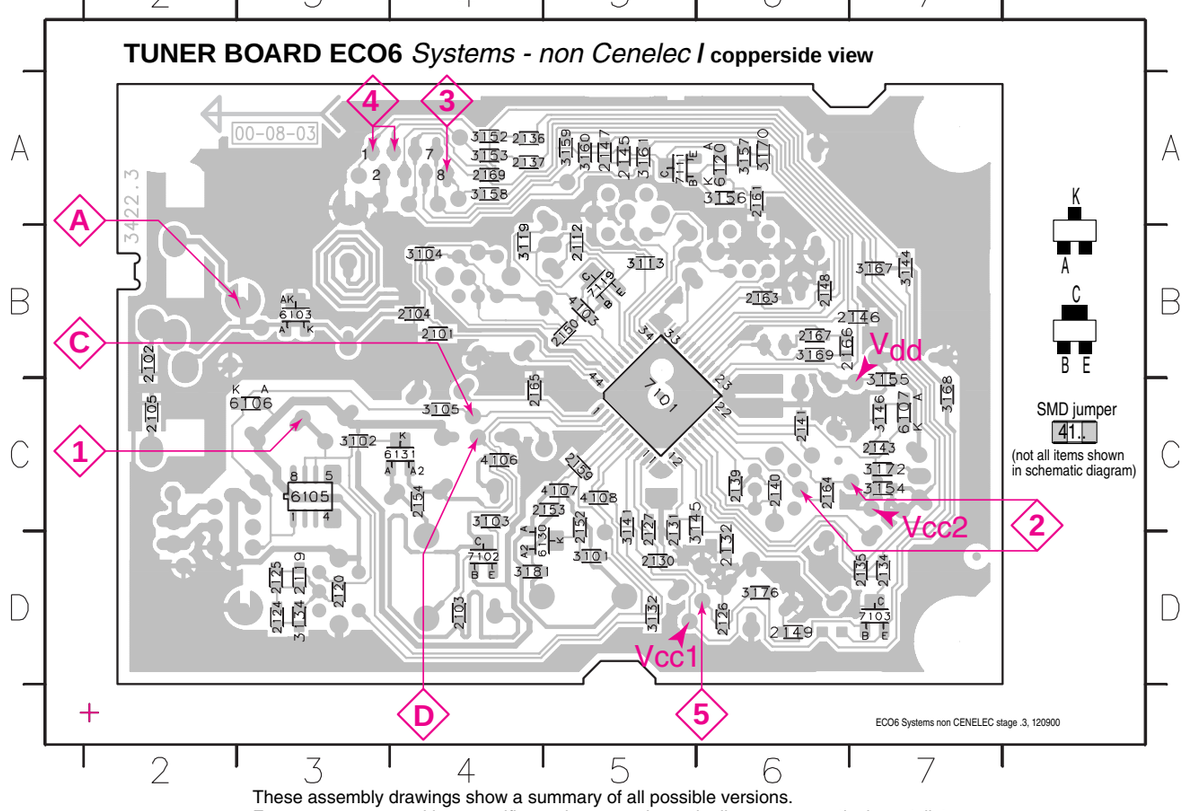
Signal path
FM
AM
MPX (Audio Frequency)
AF - left/right

1101 A1
1102 B1
1103 F2
1120 E14
1130 A2
1131 B2
1132 G13
2101 B3
2102 B1
2103 C7
2104 B3
2105 A2
2106 F3
2107 F4
2119 H6
2120 G6
2124 H6
2125 H6
2126 F7
2127 E7
2128 C8
2129 C7
2130 F11
2131 G8
2132 G8
2133 G8
2134 H8
2135 H9
2136 G14
2137 G13
2138 F9
2139 G9
2140 G9
2141 F10
2143 G12
2144 G11
2145 F12
2146 E12
2147 E12
2148 E12
2149 H7
2150 A10
2152 E4
2153 E5
2154 D5
2155 D5
2159 F6
2161 C11
2163 D11
2164 F10
2165 C7
2166 E11
2167 E11
2169 H8
3101 E4
3102 D4
3103 C6
3104 A7
3105 B6
3132 G5
3134 H6
3141 E7
3142 E7
3143 G7
3144 H7
3145 F8
3146 G13
3152 G14
3153 G13
3154 G13
3155 G11
3156 C12
3157 C12
3158 E13
3159 D13
3160 D12
3161 D13
3167 F12
3168 F11
3169 E11
3170 C12
3172 G12
3176 G7
3181 E6
5102 F2
5109 B9
5110 B10
5111 A8
5112 A11
5114 B11
5119 G9
5121 E11
5123 G5
5130 E5
5131 C6
6103 B2
6105-1 F3
6105-2 G5
6106 C3
6107 G13
6120 C13
6130 E5
6131 D5
7101 C8
7102 C6
7103 H7
7111 C13
7112 G12
T102 B2
T103 B2
T105 F2
T106 F2
T109 B6
T110 F5
T111 F4
T112 F7
T113 A8
T114 B10
T115 A8
T116 F10
T117 G13
T118 G11
T120 F13
T121 F13
T122 F13
T123 E13
T124 G14
T125 F14
T126 F13
T127 F13
T128 D7
T140 F11
T141 F10
T142 F10

1101 A6 1120 A4 1132 A5 2128 C4 2138 C2 3142 D2 5110 B3 5114 A2 5123 D5 7112 C1 9104 B5 9107 D4
1102 B6 1130 B5 2106 C5 2129 B4 2144 B2 5102 D6 5111 B4 5119 C2 5130 D3 9101 A2 9105 B1 9108 C4
1103 D6 1131 D5 2107 B5 2133 D2 2155 C4 5109 A3 5112 A3 5121 B2 5131 D4 9103 B2 9106 B3 9109 D2



2101 B4 2119 D3 2130 D5 2137 A4 2146 B7 2153 C5 2165 C4 3103 C4 3134 D3 3152 A4 3158 A4 3169 B6 4106 C4 6107 C7 7103 D7
2102 B1 2120 D3 2131 C5 2139 C6 2147 A5 2154 C4 2166 B6 3104 B4 3141 C5 3153 A4 3159 A5 3170 A6 4107 C5 6120 A6 7111 A5
2103 D4 2124 D3 2132 D6 2140 C6 2148 B6 2159 C5 2167 B6 3105 C4 3143 D6 3154 C7 3160 A5 3172 C7 4108 C5 6130 D4 7119 B5
2104 B4 2125 D3 2134 D7 2141 C6 2149 D6 2161 A6 2169 A4 3113 B5 3144 B7 3155 C7 3161 A5 3176 D6 6103 B3 6131 C4
2105 C1 2126 D6 2135 D7 2143 C7 2150 B5 2163 B6 3101 D5 3119 B5 3145 C5 3156 A6 3167 B7 3181 D4 6105 C3 7101 C5
2112 B5 2127 C5 2136 A4 2145 A5 2152 C5 2164 C6 3102 C3 3132 D5 3146 C7 3157 A6 3168 C7 4103 B5 6106 C3 7102 D4



These assembly drawings show a summary of all possible versions.
For components used in a specific version see schematic diagram respectively partslist.

7A-3

TUNER ADJUSTMENT TABLE (ECO6 FM/MW- and FM/MW/LW - versions with AM-frame aerial)

Waverange	Input frequency	Input	Tuned to	Adjust	Output	Scope/Voltmeter
VARICAP ALIGNMENT						
FM 87.5 - 108MHz (65.81 - 74, 87.5 - 108MHz)			108MHz	5130		8V ±0.2V
			87.5MHz (65.81MHz)	check		4.3V ±0.5V (1.2V ±0.5V)
MW FM/AM-version, 10kHz grid 530 - 1700kHz			1700kHz	5123		8V ±0.2V
			530kHz	check		1.1V ±0.4V
FM/MW-version, 9kHz grid 531 - 1602kHz			1602kHz	5123		6.9V ±0.2V
			531kHz	check	1	1.1V ±0.4V
LW 153 - 279kHz			279kHz	5122		8V ±0.2V
			153kHz	check		1.1V ±0.4V
MW FM/MW/LW- version, 9kHz grid 531 - 1602kHz			1602kHz	5123		8V ±0.2V
			531kHz	check		1.1V ±0.4V
FM IF						
FM	10.7MHz, 45mV continuous wave	D	IC 7101 21 shortcircuit to block AFC 2141	5119	2	0 ± 3 mV DC
FM RF						
FM 87.5 - 108MHz (65.81 - 74, 87.5 - 108MHz)	108MHz	A	108MHz	2155	4	MAX
	87.5MHz (65.81MHz)	mod=1kHz Δf=±22.5kHz	87.5MHz (65.81MHz)	5131		
VCO						
FM	98MHz, 1mV continuous wave	A	98MHz	3142	3	152kHz ±1kHz 1)
AM IF						
MW	450kHz connect pin 6 of IC 7101 (AM Osc.) with 3.3kΩ to Vcc	C	IC 7101 36 100nF 220R	5111	5	f0 symmetric max.
		Δf=±10kHz V_{RF} = 0.5mV (as low as possible)	IC 7101 40 100nF 220R see remark 2)	5112		
AM AFC **MW**		C continuous wave V_{RF} = 2mV		5114	2	0 ± 2 mV DC
AM RF 3)						
MW 4) FM/MW/LW- and FM/MW-version (9kHz grid) 531 - 1602kHz	1494kHz	B	1494kHz	2106	5	f0 symmetric max.
	558kHz		558kHz	5102		
LW	198kHz		198kHz	5103		
MW FM/AM-version, 10kHz grid 530 - 1700kHz	1500kHz	Δf = ±30kHz V_{RF} as low as possible	1500kHz	2106		
	560kHz		560kHz	5102		

ECO6, Sys + PA with frame aerial, 070799

Use Service Testprogram. By selecting the TUNER TEST test frequencies will be stored as preset frequencies automatically.

1) If sensitivity of frequency counter is too low adjust to max. channel separation (input signal: stereo left 90% + 9%, adjust output on right channel to minimum)

2) RC network serves for damping the IF-filter while adjusting the other one.

3) For AM RF adjustments the original frame antenna has to be used !

4) MW has to be aligned before LW.

↕ Repeat

Electrical Partslist *ECO6* *SYSTEMS NON-CENELEC*

7A-4

MISCELLANEOUS

1101	2422 015 19376	SOCKET 2P CLICKFIT	USA only
1102	4822 267 10283	SOCKET COAX, IEC 75Ω	not USA
1103	4822 265 31184	JST CONNECTOR 2 POLE	
1120	4822 265 11515	FFC SOCKET, 8P	

CAPACITORS

2101 ©	4822 126 13692	47pF	1%	63V	
2102 ©	4822 126 13838	100nF	10%	50V	not USA
2103 ©	5322 122 31647	1nF	10%	63V	
2104 ©	5322 122 32531	100pF	5%	50V	
2105 ©	4822 126 13838	100nF	10%	50V	USA only
2106	2020 800 00191	3-11pF TRIMCAP.,N450			
2107	4822 121 51319	1µF	20%	50V	
2120 ©	4822 126 13689	18pF	1%	63V	
2124 ©	5322 122 32654	22nF	10%	63V	
2125 ©	2020 552 96199	560pF	1%	50V	
2126 ©	5322 122 31863	330pF	5%	50V	
2127 ©	4822 126 14076	220nF	20%	25V	
2128	4822 124 40248	10µF	20%	63V	
2129	4822 124 41584	100µF	20%	10V	
2130 ©	5322 122 32654	22nF	10%	63V	
2131 ©	4822 126 13482	470nF	20%	16V	
2132 ©	4822 126 13482	470nF	20%	16V	
2133	4822 124 21913	1µF	20%	63V	
2134 ©	4822 126 13188	15nF	5%	63V	not USA
2134 ©	5322 122 32654	22nF	10%	63V	USA only
2135 ©	4822 126 13188	15nF	5%	63V	not USA
2135 ©	5322 122 32654	22nF	10%	63V	USA only
2136 ©	4822 126 14076	220nF	20%	25V	
2137 ©	4822 126 14076	220nF	20%	25V	
2138	4822 124 22652	2,2µF	20%	50V	
2139 ©	4822 126 14236	15pF	5%	50V	
2140 ©	4822 126 13695	82pF	1%	63V	
2141 ©	4822 126 13838	100nF	10%	50V	
2143 ©	4822 126 14076	220nF	20%	25V	
2144	4822 124 21913	1µF	20%	63V	
2145 ©	4822 122 33575	220pF	5%	50V	
2146 ©	4822 122 33575	220pF	5%	50V	
2147 ©	4822 122 33575	220pF	5%	50V	
2148 ©	4822 122 33127	2,2nF	10%	63V	
2149 ©	5322 122 32659	33pF	5%	50V	RDS only
2150 ©	4822 126 13838	100nF	10%	50V	
2152 ©	4822 126 12105	33nF	5%	63V	not for East Europe
2152 ©	5322 116 80853	560pF	5%	63V	for East Europe only
2153 ©	4822 126 13486	15pF	2%	63V	not for East Europe
2153 ©	4822 122 33926	12pF	2%	50V	for East Europe only
2155	2020 800 00191	3-11pF TRIMCAP.,N450			
2159 ©	5322 122 32659	33pF	5%	50V	
2164 ©	4822 126 13482	470nF	20%	16V	
2165 ©	4822 126 13838	100nF	10%	50V	
2166 ©	5322 122 31647	1nF	10%	63V	
2167 ©	4822 122 33926	12pF	5%	50V	
2169 ©	4822 122 33127	2,2nF	10%	63V	RDS only

RESISTORS

3101 ©	4822 051 20333	33kΩ	5%	0,1W	
3102 ©	4822 117 10837	100kΩ	1%	0,1W	
3103 ©	4822 051 20822	8,2kΩ	5%	0,1W	
3104 ©	4822 117 13577	330Ω	1%	0,1W	
3105 ©	4822 117 11503	220Ω	5%	0,1W	
3132 ©	4822 051 20479	47Ω	5%	0,1W	
3134 ©	4822 051 20223	22kΩ	5%	0,1W	
3141 ©	4822 117 11148	56kΩ	1%	0,1W	
3142	4822 100 12159	TRIMPOT. 100kΩ			
3143 ©	4822 051 20223	22kΩ	5%	0,1W	RDS only
3144 ©	4822 051 10102	1kΩ	2%	0,25W	RDS only
3145 ©	4822 117 11449	2,2kΩ	1%	0,1W	
3146 ©	4822 051 20229	22Ω	5%	0,1W	
3152 ©	4822 051 20471	470Ω	5%	0,1W	
3153 ©	4822 051 20471	470Ω	5%	0,1W	
3154 ©	4822 117 13577	330Ω	1%	0,1W	
3155 ©	4822 117 11503	220Ω	5%	0,1W	
3156 ©	4822 117 10837	100kΩ	1%	0,1W	
3157 ©	4822 117 10837	100kΩ	1%	0,1W	
3158 ©	4822 051 20471	470Ω	5%	0,1W	
3159 ©	4822 051 20471	470Ω	5%	0,1W	
3160 ©	4822 051 20471	470Ω	5%	0,1W	
3161 ©	4822 051 20223	22kΩ	5%	0,1W	
3167 ©	4822 051 20121	120Ω	5%	0,1W	
3168 ©	4822 051 20121	120Ω	5%	0,1W	
3169 ©	4822 051 20154	150kΩ	5%	0,1W	
3170 ©	4822 117 10837	100kΩ	1%	0,1W	
3172 ©	4822 051 20562	5,6kΩ	5%	0,1W	
3176 ©	4822 051 20333	33kΩ	5%	0,1W	RDS only
3181 ©	4822 051 10102	1kΩ	2%	0,25W	
4103 ©	4822 051 20008	CHIP JUMPER 0805			
4106 ©	4822 051 20008	CHIP JUMPER 0805			
4107 ©	4822 051 20008	CHIP JUMPER 0805			
4108 ©	4822 051 20008	CHIP JUMPER 0805			

COILS

5102	4822 157 71634	RF-COIL MW
5109	4822 242 70665	FM-IF FILTER 10,7MHz
5110	4822 242 70665	FM-IF FILTER 10,7MHz
5111	2422 549 44023	AM-IF FILTER 450kHz
5112	4822 157 70302	AM-IF FILTER 450kHz
5114	4822 157 70302	AM-IF FILTER 450kHz
5119	4822 157 11443	DISCRIMINATOR COIL
5121	4822 242 10261	QUARTZ 75kHz
5123	2422 549 44108	RF-COIL, AM-OSCILLATOR
5130	4822 157 11843	RF COIL 1,5 TURNS
5131	4822 157 11843	RF COIL 1,5 TURNS

DIODES

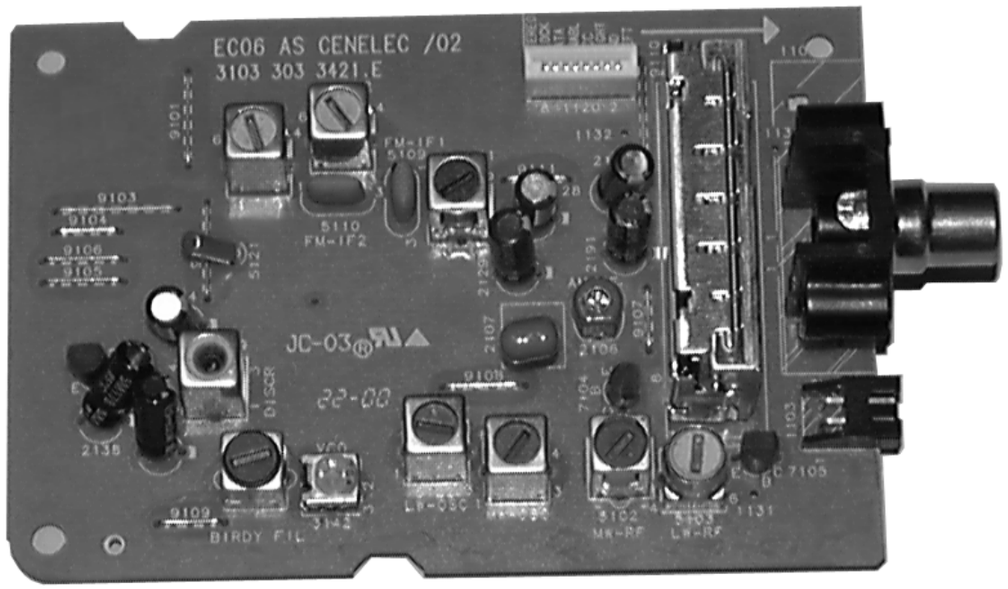
6103 ©	5322 130 34337	BAV99
6105 ©	4822 130 83075	HN1V02H
6106 ©	4822 130 83757	BAS216
6107 ©	9340 386 90115	BZX284-C11
6120 ©	4822 130 83757	BAS216
6130 ©	4822 130 82833	1SV228
6131 ©	4822 130 82833	1SV228

TRANSISTORS

7102	4822 130 42131	BF550	
7103 ©	5322 130 42756	BC857C	RDS only
7111 ©	5322 130 42755	BC847C	
7112	4822 130 44503	BC547C	

INTEGRATED CIRCUITS

7101 ©	9351 740 80557	TEA5757H/V1, RADIO IC



ECO6 Tuner Board

version: ***SYSTEMS CENELEC***

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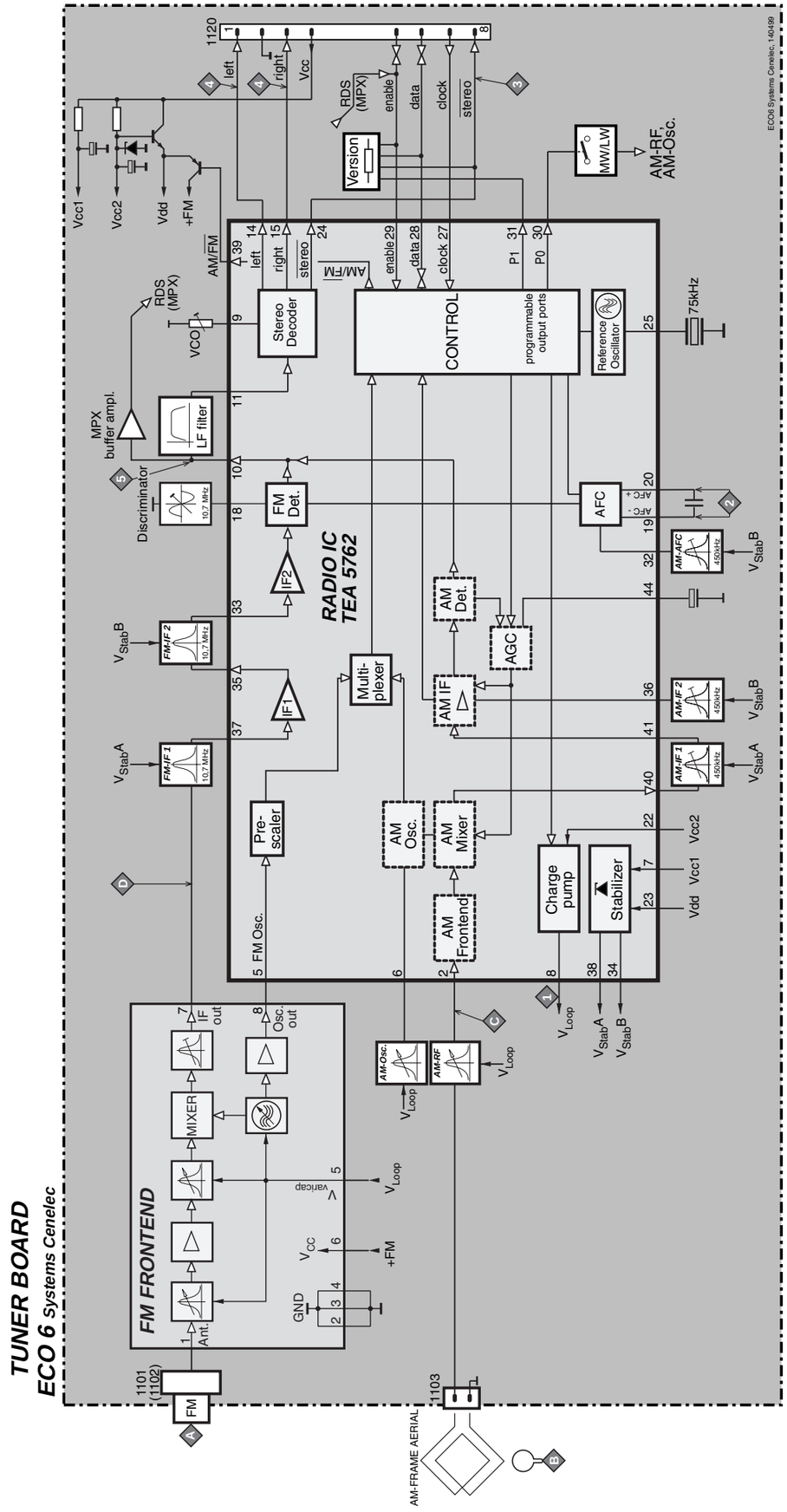
7B-1

BLOCK DIAGRAM



7B-2

TUNER BOARD ECO6 / SYSTEMS-CENELEC

VERSION PROGRAMMING COMPONENTS

VERSION	6120	3156	3157	3170	7111
/00 /02 FM/MW/LW	⊠				⊠
/00 /02 FM/MW		⊠	⊠	⊠	
/01 FM/MW		⊠	⊠	⊠	⊠
/14 FM-OIRT/MW	⊠			⊠	
/17 FM/AM	⊠				⊠

⊠ component mounted

VERSION DETECTION

PROGRAMMABLE OUTPUT PORTS

AM-IF1

5111 450kHz

AM-IF2

5112 450kHz

AM-AFC

5114 450kHz

FM-IF1

5109

FM-IF2

5110

7101 TEA5762

FM FRONTEND

1110 FE450

FM 75 OHM

MW/LW-RF

AM FRAME AERIAL

AM-OSCILLATOR

BIRDY FILTER

DISCRIMINATOR

MPX BUFFER AMPLIFIER

CONTROL

STEREO DECODER

VCO

STABILIZER

CHARGE PUMP

AFC

XTAL OSC

PRE-SCALER

MULTI-PLEXER

AM FRONTEND

AM MIXER

AM OSC

AM IF

FM IF1

FM IF2

AM DET

FM DET

AGC

AGC CONTROL

RIPPLE

VSTABA

VSTABB

LW only

RDS only

marked components not for LW version

LEGEND

* ... only assembled in FM/AM-version
(p)...for provision only
USA ... for USA version only
LW ... for LW version only

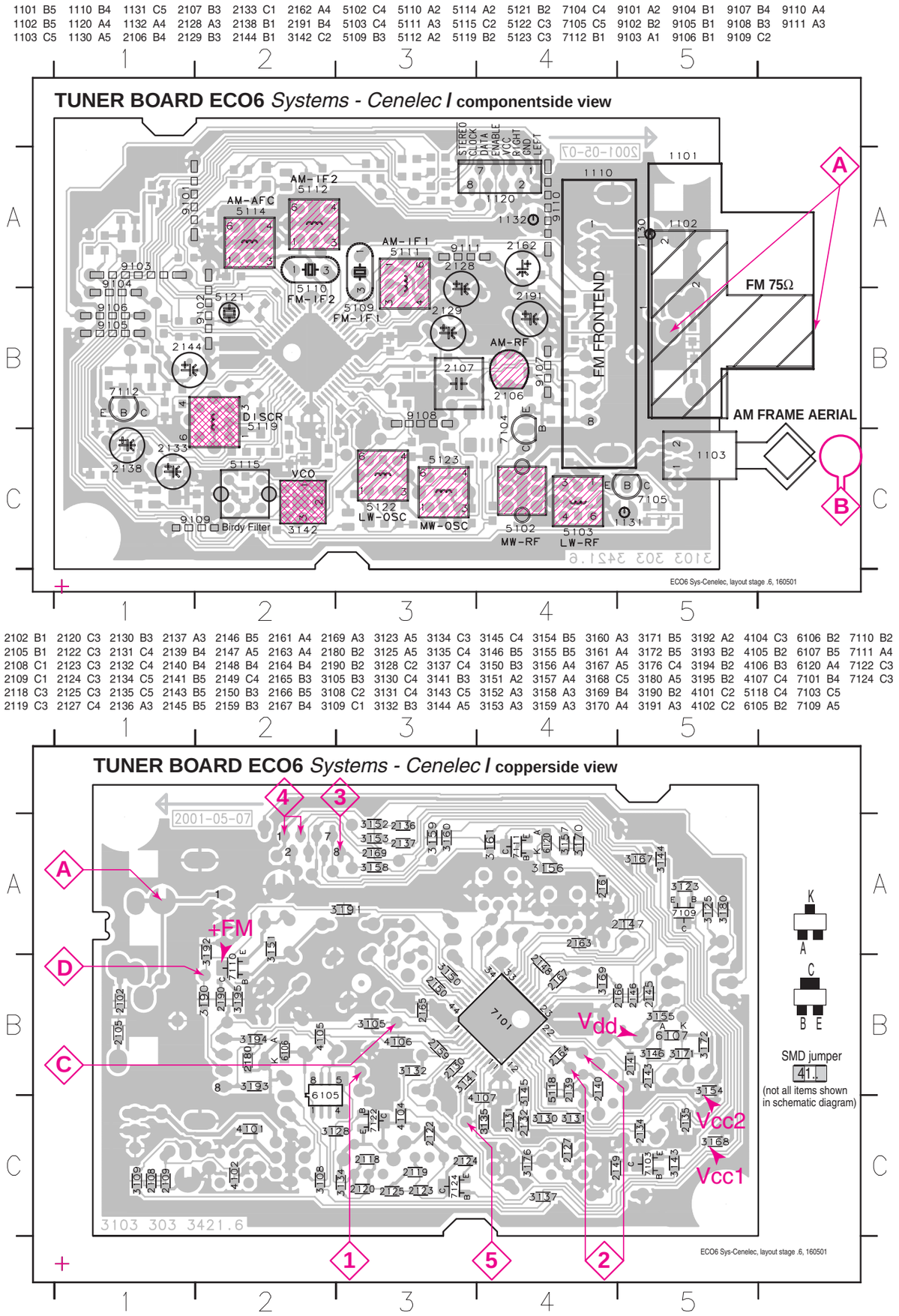
SMD jumper
41xx
0R

...V FM mode stereo
...V MW mode
...V LW mode
EVM
voltages measured while set is tuned to a strong transmitter

Signal path
FM
AM
MPX (Audio Frequency)
AF - left/right

ECO6 Sys-Cenelec, 010517

1101	A2	5121	E11
1102	B1	5122	H5
1103	E2	5123	G5
1110	B2	6105-1	E4
1120	E14	6105-2	G6
1130	A2	6106	D4
1131	C2	6107	G13
1132	F13	6120	C13
2102	B1	7101	C8
2105	A2	7103	H8
2106	E3	7104	D2
2107	E4	7105	F4
2108	G3	7109	H3
2109	G3	7110	H12
2118	H6	7111	C13
2119	H6	7112	G12
2120	H6	7122	H4
2122	I6	7124	H7
2123	H6	T102	B2
2124	H6	T103	B2
2125	H6	T104	B6
2127	E7	T105	E2
2128	B8	T106	E2
2129	C7	T107	C3
2130	F11	T109	D5
2131	F8	T110	D5
2132	F8	T111	E5
2133	F8	T112	F7
2134	I8	T113	A9
2135	I9	T114	B11
2136	H14	T116	F10
2137	H13	T117	F13
2138	F9	T118	G11
2139	G9	T120	F13
2140	G9	T121	F13
2141	F10	T122	E13
2143	G12	T123	E13
2144	G11	T124	G14
2145	E11	T125	F14
2146	E12	T126	F13
2147	E12	T127	F13
2148	E12	T140	F11
2149	H7	T141	F10
2150	A10	T142	F10
2159	D5		
2161	C11		
2162	H12		
2163	D11		
2164	G10		
2165	C7		
2166	E11		
2167	E11		
2169	G8		
2180	C4		
2190	C3		
2191	C3		
3105	D5		
3108	D2		
3109	G4		
3123	H3		
3125	H2		
3128	H3		
3130	I9		
3131	I9		
3132	G4		
3134	H6		
3135	E7		
3137	H7		
3141	E7		
3142	E6		
3143	G7		
3144	G8		
3145	F8		
3146	G13		
3150	H12		
3151	H12		
3152	G14		
3153	G13		
3154	F13		
3155	G12		
3156	C12		
3157	D12		
3158	E13		
3159	D13		
3160	D13		
3161	D13		
3167	F12		
3168	F11		
3169	E11		
3170	D12		
3171	G12		
3172	G12		
3176	H7		
3180	I3		
3190	B6		
3191	B7		
3192	B6		
3193	B4		
3194	C4		
3195	C3		
4101	E2		
4102	F3		
4104	H5		
5102	E3		
5103	F2		
5109	B9		
5110	B10		
5111	A9		
5112	A11		
5114	B11		
5115	E7		
5118	G9		
5119	G9		



These assembly drawings show a summary of all possible versions.
For components used in a specific version see schematic diagram respectively partslist.

7B-3

TUNER ADJUSTMENT TABLE (**ECO6 Cenelec** FM/MW - and FM/MW/LW - versions with AM-frame aerial)

Waverange	Input frequency	Input	Tuned to	Adjust	Output	Scope/Voltmeter
VARICAP ALIGNMENT						
FM 87.5 - 108MHz (50kHz grid)			108MHz	check		8V ±1.2V
			87.5MHz	check		1.6V ±0.5V
MW 531 - 1602kHz (9kHz grid)			1602kHz	5123	◇1	8V ±0.2V 3-band 6.9V ±0.2V 2-band
			531kHz	check		1.1V ±0.4V
LW 153 - 279kHz (3kHz grid)			279kHz	5122		8V ±0.2V
			153kHz	check		1.1V ±0.4V
FM - IF						
FM	10.7MHz, 45mV continuous wave	◇D	IC 7101 21 — shortcircuit to block AFC — 2141	5119	◇2	0mV ±3mV
FM - VCO						
FM	98MHz, 1mV continuous wave	◇A	98MHz	3142	◇3	152kHz ±1kHz 1)
FM RF (channel separation)	Note: The FM-frontend unit has already been adjusted by the factory and needs therefore no further adjustments for service purposes.					
FM	98MHz, 1mV 90% Left + 9% pilot mod=1kHz	◇A	98MHz	IF coil inside FM frontend 1110	◇4	right channel min.
AM IF						
MW	450kHz connect pin 6 of IC 7101 (AM Osc.) with 3.3kΩ to Vcc	◇C Δf = ±10kHz V_{RF} = 0.5mV (as low as possible)	IC 7101 36 — 100nF — 220R IC 7101 40 — 100nF — 220R see remark 2)	5111 5112	◇5	max. / f_o symmetric
AM AFC **MW**		◇C continuous wave V_{RF} = 2mV		5114	◇2	0mV ±2mV
AM RF 3)						
MW	1494kHz	◇B Δf = ±30kHz V_{RF} as low as possible	1494kHz	2106	◇5	max. / f_o symmetric
	558kHz		558kHz	5102		
LW	198kHz		198kHz	5103		

ECO6 Sys Cenelec, 190599

Use Service Testprogram. By selecting the TUNER TEST test frequencies will be stored as preset frequencies automatically.

1) If sensitivity of frequency counter is too low adjust to max. channel separation (input signal: stereo left 90% + 9%, adjust output on right channel to minimum)

2) RC network serves for damping the IF-filter while adjusting the other one.

3) For AM RF adjustments the original frame antenna has to be used! MW has to be aligned before LW.

↕ Repeat

Electrical Partslist *ECO6* SYSTEMS-CENELEC

7B-4

MISCELLANEOUS

1101	2422 015 19376	SOCKET CLICKFIT 2P	USA only
1102	4822 267 10283	SOCKET COAX, IEC 75Ω	not USA
1103	4822 265 31184	JST CONNECTOR, 2 POLE	
1110	2422 542 90071	FM FRONTEND	
1120	4822 265 11515	FFC SOCKET, 8P	

CAPACITORS

2102 ©	4822 126 13838	100nF	10%	50V	not USA
2105 ©	4822 126 13838	100nF	10%	50V	USA only
2106	2020 800 00204	TRIMCAP. 4,2 - 20pF, N750			LW only
2106	2020 800 00191	TRIMCAP. 3 - 11pF, N450			FM/AM only
2107	4822 121 51319	1µF	20%	50V	
2108 ©	5322 122 32531	100pF	5%	50V	LW only
2109 ©	5322 122 32448	10pF	5%	50V	LW only
2120 ©	4822 126 13689	18pF	1%	63V	FM/AM only
2120 ©	5322 122 32658	22pF	5%	50V	LW only
2122 ©	4822 122 33891	3,3nF	10%	63V	LW only
2123 ©	2020 552 93494	390pF	1%	50V	LW only
2124 ©	4822 122 33177	10nF	20%	50V	FM/AM only
2125 ©	2020 552 96199	560pF	1%	50V	
2127 ©	4822 126 14076	220nF	20%	25V	
2128	4822 124 40248	10µF	20%	63V	
2129	4822 124 41584	100µF	20%	10V	
2130 ©	5322 122 32654	22nF	10%	63V	
2131 ©	4822 126 13482	470nF	20%	16V	
2132 ©	4822 126 13482	470nF	20%	16V	
2133	4822 124 21913	1µF	20%	63V	
2134 ©	3198 017 31530	15nF	10%	50V	not USA
2134 ©	5322 122 32654	22nF	10%	63V	USA only
2135 ©	3198 017 31530	15nF	10%	50V	not USA
2135 ©	3198 017 32230	22nF	10%	25V	USA only
2136 ©	4822 126 14076	220nF	20%	25V	
2137 ©	4822 126 14076	220nF	20%	25V	
2138	4822 124 22652	2,2µF	20%	50V	
2139 ©	4822 126 14236	15pF	5%	50V	
2140 ©	4822 126 13695	82pF	1%	63V	
2141 ©	4822 126 13838	100nF	10%	50V	
2143 ©	4822 126 14076	220nF	20%	25V	
2144	4822 124 21913	1µF	20%	63V	
2145 ©	4822 122 33575	220pF	5%	50V	
2146 ©	4822 122 33575	220pF	5%	50V	
2147 ©	4822 122 33575	220pF	5%	50V	
2148 ©	4822 122 33127	2,2nF	10%	63V	
2149 ©	5322 122 32659	33pF	5%	50V	RDS only
2150 ©	4822 126 13838	100nF	10%	50V	
2159 ©	5322 122 31151	22µF	20%	50V	
2163 ©	4822 126 13838	100nF	10%	50V	LW only
2164 ©	4822 126 13482	470nF	20%	16V	
2165 ©	4822 126 13838	100nF	10%	50V	
2166 ©	5322 122 31647	1nF	10%	63V	
2167 ©	4822 122 33926	12pF	5%	50V	
2169 ©	4822 122 33127	2,2nF	10%	63V	RDS only
2180 ©	3198 017 31030	10nF	10%	50V	
2190 ©	4822 126 13838	100nF	10%	50V	
2191	4822 124 40178	100µF	20%	10V	

RESISTORS

3105 ©	4822 117 11503	220Ω	5%	0,1W	
3108 ©	4822 117 11449	2,2kΩ	1%	0,1W	LW only
3109 ©	4822 051 20472	4,7kΩ	5%	0,1W	LW only
3123 ©	4822 051 20472	4,7kΩ	5%	0,1W	LW only
3125 ©	4822 117 10833	10kΩ	1%	0,1W	LW only

RESISTORS

3128 ©	4822 117 11449	2,2kΩ	1%	0,1W	LW only
3130 ©	3198 021 38210	820Ω	5%	0,06W	
3131 ©	3198 021 38210	820Ω	5%	0,06W	
3132 ©	4822 051 20479	47Ω	5%	0,1W	
3134 ©	4822 051 20223	22kΩ	5%	0,1W	
3135 ©	3198 021 31020	1kΩ	5%	0,06W	
3137 ©	4822 051 20223	22kΩ	5%	0,1W	LW only
3141 ©	4822 117 11148	56kΩ	1%	0,1W	
3142	4822 100 12159	TRIMPOT. 100kΩ			
3143 ©	4822 051 20223	22kΩ	5%	0,1W	RDS only
3144 ©	4822 051 10102	1kΩ	2%	0,25W	RDS only
3145 ©	4822 117 11449	2,2kΩ	1%	0,1W	
3146 ©	4822 051 20229	22Ω	5%	0,1W	
3150 ©	4822 117 10833	10kΩ	1%	0,1W	
3151 ©	4822 051 20683	68kΩ	5%	0,1W	
3152 ©	4822 051 20471	470Ω	5%	0,1W	
3153 ©	4822 051 20471	470Ω	5%	0,1W	
3154 ©	4822 117 13577	330Ω	1%	0,1W	
3155 ©	4822 117 10353	150Ω	5%	0,1W	
3156 ©	4822 117 10837	100kΩ	1%	0,1W	
3157 ©	4822 117 10837	100kΩ	1%	0,1W	
3158 ©	4822 051 20471	470Ω	5%	0,1W	
3159 ©	4822 051 20471	470Ω	5%	0,1W	
3160 ©	4822 051 20471	470Ω	5%	0,1W	
3161 ©	4822 051 20223	22kΩ	5%	0,1W	
3167 ©	4822 051 20121	120Ω	5%	0,1W	
3168 ©	4822 051 20121	120Ω	5%	0,1W	
3169 ©	4822 051 20154	150kΩ	5%	0,1W	
3170 ©	4822 117 10837	100kΩ	1%	0,1W	
3171 ©	4822 117 10834	47kΩ	1%	0,1W	
3172 ©	4822 051 20562	5,6kΩ	5%	0,1W	
3176 ©	4822 051 20333	33kΩ	5%	0,1W	RDS only
3180 ©	4822 117 10833	10kΩ	1%	0,1W	LW only
3190 ©	4822 051 20121	120Ω	5%	0,1W	
3191 ©	4822 051 20121	120Ω	5%	0,1W	
3192 ©	4822 117 13577	330Ω	1%	0,1W	
3193 ©	4822 117 13577	330Ω	1%	0,1W	
3194 ©	4822 117 11449	2,2kΩ	1%	0,1W	
3195 ©	4822 051 20101	100Ω	5%	0,1W	
4101 ©	4822 051 20008	CHIP JUMPER 0805			FM/AM only
4102 ©	4822 051 20008	CHIP JUMPER 0805			FM/AM only
4104 ©	4822 051 20008	CHIP JUMPER 0805			FM/AM only
4105 ©	4822 051 20008	CHIP JUMPER 0805			
4106 ©	4822 051 20008	CHIP JUMPER 0805			
4107 ©	4822 051 20008	CHIP JUMPER 0805			

COILS

5102	4822 157 71634	RF-COIL MW	
5103	2422 549 44107	RF-COIL LW	LW only
5109	4822 157 71639	FM-IF FILTER 10,7MHz	
5110	4822 242 70665	FM-IF FILTER 10,7MHz	
5111	2422 549 44023	AM-IF FILTER 450kHz	
5112	4822 157 70302	AM-IF FILTER 450kHz	
5114	4822 157 70302	AM-IF FILTER 450kHz	
5115	4822 157 71636	ANTI BIRDY FILTER	
5118 ©	2422 535 95881	100nH	
5119	4822 157 11443	DISCRIMINATOR COIL	
5121	4822 242 10261	QUARTZ 75kHz	
5122	2422 549 44108	RF-COIL, LW-OSCILLATOR	LW only
5123	2422 549 44108	RF-COIL, MW-OSCILLATOR	

DIODES

6105 ©	4822 130 83075	HN1V02H	
6106 ©	4822 130 83757	BAS216	
6107 ©	9340 386 90115	BZX284-C11	
6120 ©	4822 130 83757	BAS216	

TRANSISTORS

7103 ©	5322 130 42756	BC857C	RDS only
7104	9322 003 64676	TBC337-40	LW only
7105	9322 003 64676	TBC337-40	LW only
7109 ©	4822 130 60373	BC856B	LW only
7110 ©	4822 130 60373	BC856B	
7111 ©	5322 130 42755	BC847C	
7112	4822 130 44503	BC547C	
7122 ©	5322 130 42755	BC847C	LW only
7124 ©	5322 130 42755	BC847C	LW only

INTEGRATED CIRCUITS

7101	4822 209 90315	TEA5762H/V1, RADIO IC

SUPPLY & MAIN BOARDS

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8-1

Brief introduction of the Supply & Main Boards

Supply Board

The purpose of the Supply Board is to provide the rectified voltages for the other modules used in LX7000SA or LX8000SA with the exception of the Power Amplifier Module that has its own rectified supply circuitry onboard. The Supply Board provides outputs +12V, +5V6, +5V and +3V3 supply voltages.

Main Board

The purpose of the Main Board is to provide a means of electrical connection between the mains supply and the transformer. The electronic Low Power Standby (LPS) circuit is also on the Main Board.

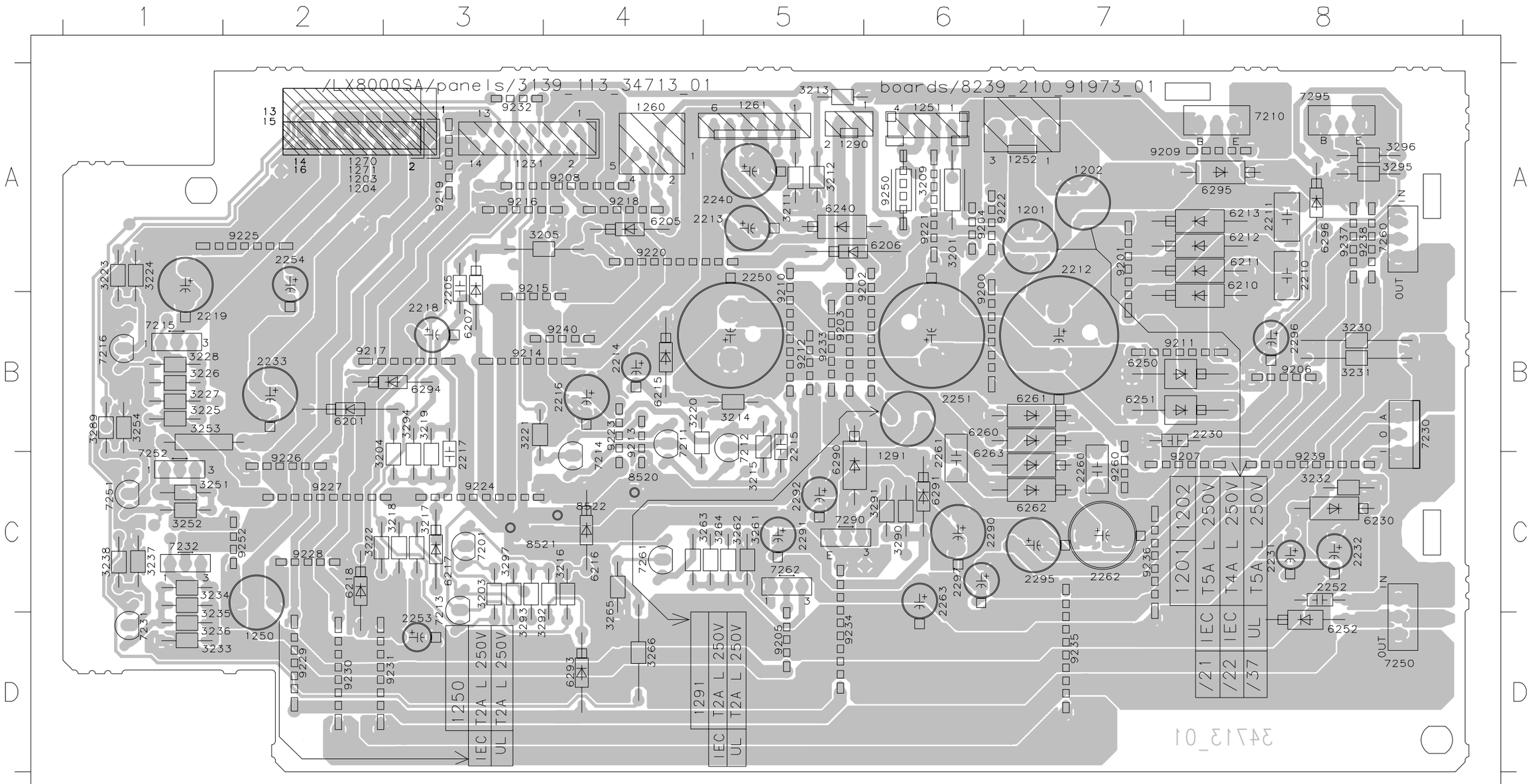
a. Low Power Standby (LPS)
   Standby Transformer (5905) provides the LPS supply to control the relay (1910), cutting of the mains supply to the transformer during the ECO Power (standby) mode.

b. Voltage Selector (For /21 version)
   The Voltage Selector (1911) and addition connector (1909) provide a means of switching to different mains supply voltages with the use of a /21 version transformer.

8-2

SUPPLY BOARD - COMPONENT LAYOUT

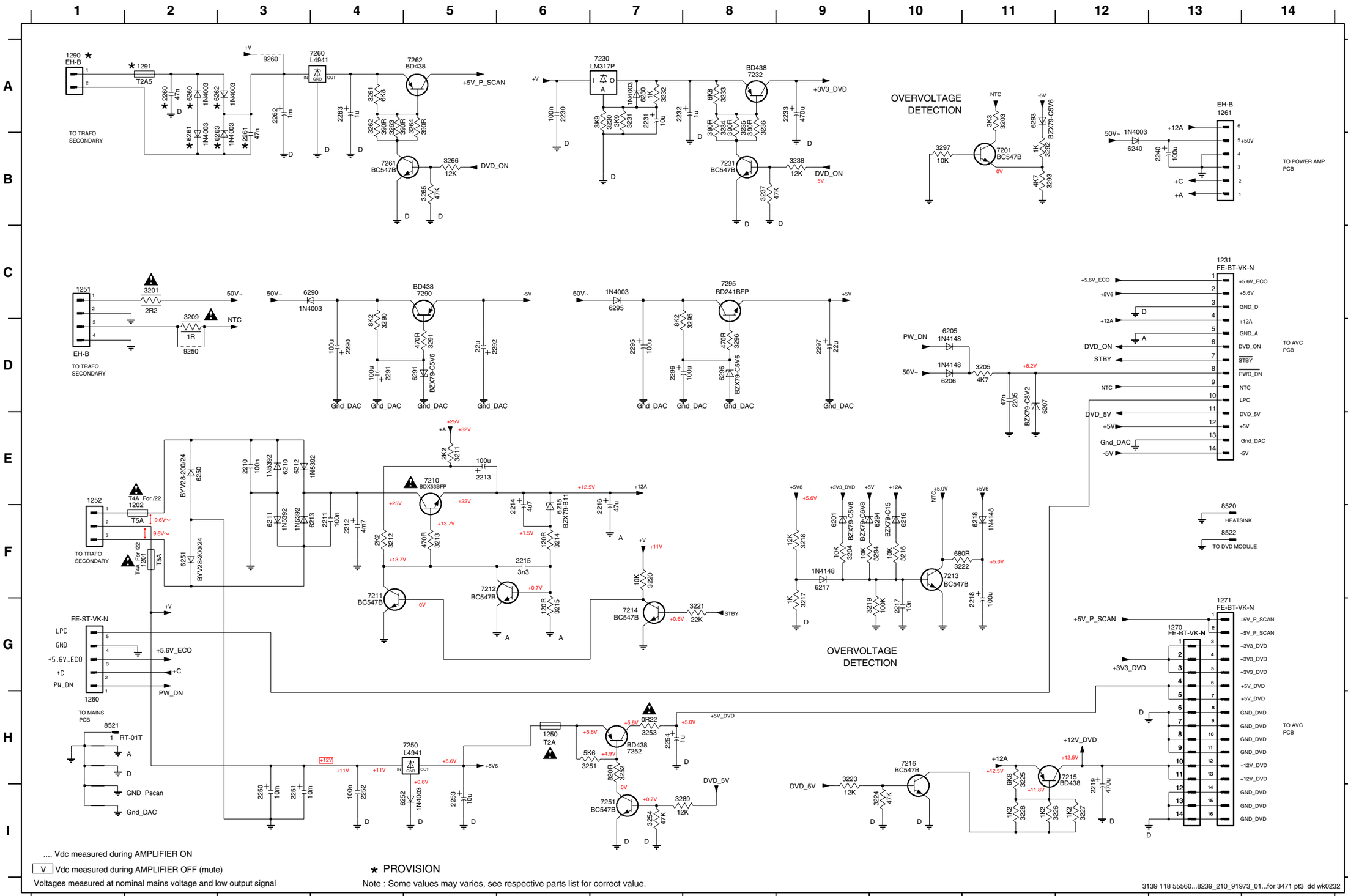
1201 A7	1290 A5	2219 B1	2261 C6	3205 A4	3221 B3	3234 C1	3264 C5	6201 B2	6230 C8	6294 B3	7231 D1	8522 C4	9211 B7	9223 B4	9235 D7
1202 A7	1291 C6	2230 B8	2262 C7	3209 A6	3222 C2	3235 D1	3265 D4	6205 A4	6240 A5	6295 A8	7232 C1	9200 A6	9212 B5	9224 C3	9236 C7
1203 A2	2205 A3	2231 C8	2263 C6	3211 A5	3223 A1	3236 D1	3266 D4	6206 A6	6250 B7	6296 A8	7250 D8	9201 A7	9213 B4	9225 A2	9237 A8
1204 A2	2210 A8	2232 C8	2290 C6	3212 A5	3224 A1	3237 C1	3289 B1	6207 B3	6251 B7	7201 C3	7251 C1	9202 A5	9214 B3	9226 C2	9238 A8
1231 A3	2211 A8	2233 B2	2291 C5	3213 A5	3225 B1	3238 C1	3290 C6	6210 A8	6252 D8	7210 A8	7252 C1	9203 B5	9215 A3	9227 C2	9239 C8
1250 D2	2212 A7	2240 A5	2292 C5	3214 B5	3226 B1	3251 C1	3291 C6	6211 A8	6260 B6	7211 B4	7260 A8	9204 A6	9216 A3	9228 C2	9240 B4
1251 A6	2213 A5	2250 A5	2295 C7	3215 C5	3227 B1	3252 C1	3292 D3	6212 A8	6261 B7	7212 B5	7261 C4	9205 D5	9217 B2	9229 D2	9250 A6
1252 A6	2214 B4	2251 B6	2296 B8	3216 C4	3228 B1	3253 B1	3293 D3	6213 A8	6262 C7	7213 C3	7262 C5	9206 B8	9218 A4	9230 D2	9252 C2
1260 A4	2215 B5	2252 C8	2297 C6	3217 C3	3230 B8	3254 B1	3294 B3	6215 B4	6263 C6	7214 C4	7290 C5	9207 C8	9219 A3	9231 D3	9260 C7
1261 A5	2216 B4	2253 D3	3201 A6	3218 C3	3231 B8	3261 C5	3295 A8	6216 C4	6290 C5	7215 B1	7295 A8	9208 A4	9220 A4	9232 A3	
1270 A2	2217 C3	2254 A2	3203 C3	3219 B3	3232 C8	3262 C5	3296 A8	6217 C3	6291 C6	7216 B1	8520 C4	9209 A7	9221 A6	9233 B5	
1271 A2	2218 B3	2260 C7	3204 C2	3220 B4	3233 D1	3263 C4	3297 C3	6218 C2	6293 D4	7230 B8	8521 C3	9210 A5	9222 A6	9234 D5	



This assembly drawing shows a summary of all possible versions. For components used in a specific version see schematic diagram and respective parts list. 3139 113 3471 pt3 dd wk0232

8-3

SUPPLY BOARD - CIRCUIT DIAGRAM

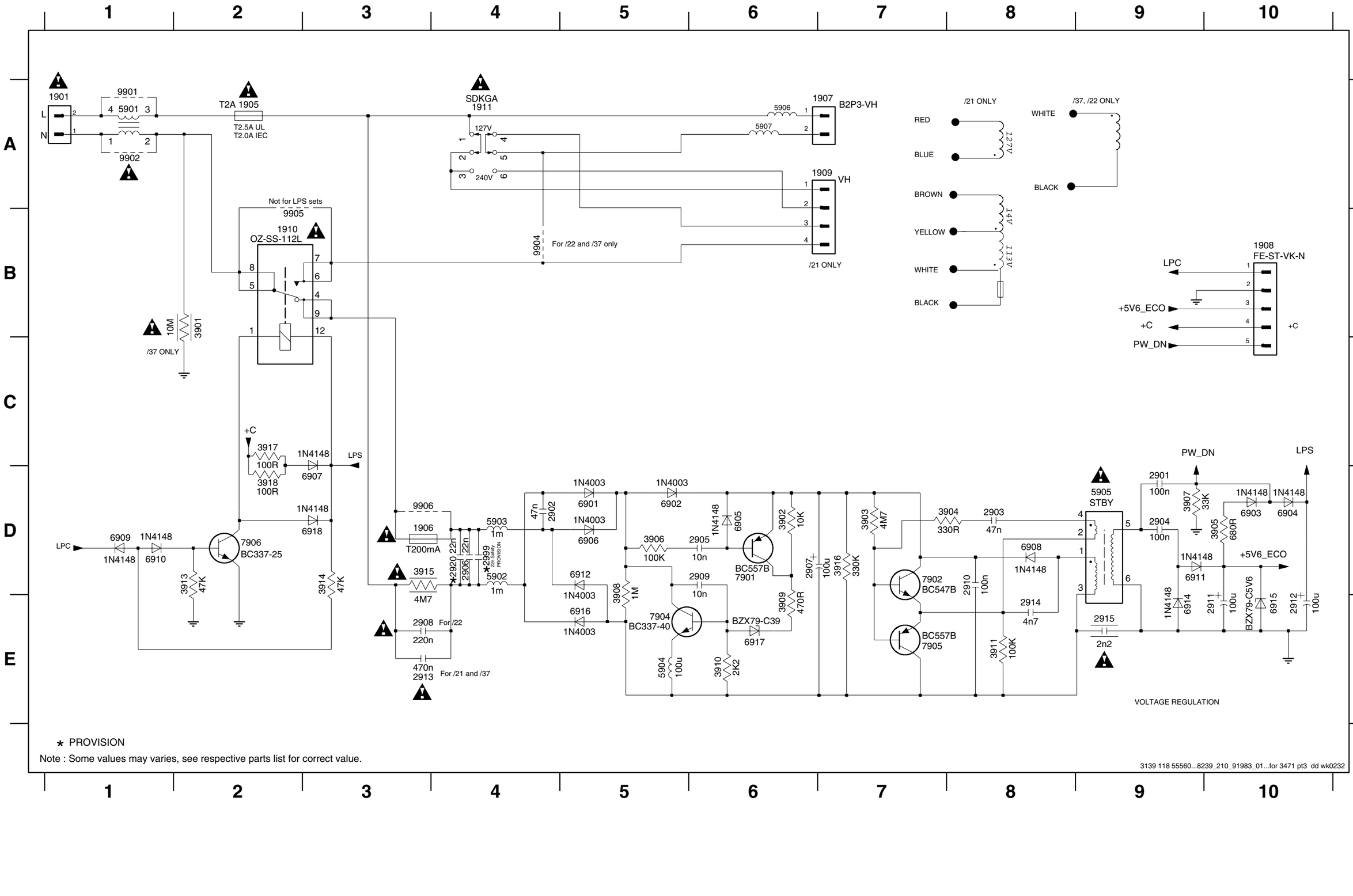


1201 F2
1202 F2
1231 C13
1250 H6
1251 C1
1252 E1
1260 H1
1261 A13
1270 G13
1271 G13
1290 A1
1291 A2
2205 D11
2210 E3
2211 F4
2212 F4
2213 E5
2214 F6
2215 F6
2216 F7
2217 G10
2218 G11
2219 I12
2230 A6
2231 A7
2232 A7
2233 A9
2240 B13
2250 I3
2251 I3
2252 I4
2253 I5
2254 H7
2260 A2
2261 B3
2262 A3
2263 A4
2290 D4
2291 D4
2292 D5
2295 D7
2296 D7
2297 D9
3201 C2
3203 A11
3204 F9
3205 D11
3209 D2
3211 E5
3212 F4
3213 F5
3214 F6
3215 G6
3216 F10
3217 G9
3218 F9
3219 G10
3220 F7
3221 G8
3222 F10
3223 H9
3224 I10
3225 H11
3226 I11
3227 I12
3228 I11
3230 A7
3231 A7
3232 A7
3233 A8
3234 A8
3235 A8
3236 A8
3237 B8
3238 B9
3251 H6
3252 H7
3253 H7
3254 I7
3261 A4
3262 A4
3263 A4
3264 A5
3265 B5
3266 B5
3289 I7
3290 D4
3291 D5
3292 B11
3293 B11
3294 F10
3295 D8
3296 D8
3297 B10
6201 F9
6205 D10
6206 D10
6207 D11
6210 E3
6211 F3
6212 E3
6213 F3
6215 F6
6216 F10
6217 F9
6218 F11
6230 A7
6240 B12
6250 E2
6251 F2
6252 I5
6260 A2
6261 B2
6262 A3
6263 B2
6290 C4
6291 D5
6293 A11
6294 F10
6295 C7
6296 D8
7201 B11
7210 E5
7211 F4
7212 F5
7213 F10
7214 G7
7215 H12
7216 H10
7230 A7
7231 B8
7232 A8
7250 H5
7251 I7
7252 H7
7260 A4
7261 B4
7262 A5
7290 C5
7295 C8
8520 F13
8521 H1
8522 F13
9250 D2
9260 A3

8-4

MAIN BOARD - CIRCUIT DIAGRAM

1901 A1	1908 B10	2901 D9	2905 D6	2909 D6	2913 E3	2999 D4	3904 D8	3908 D5	3913 D2	3917 C2	5903 D4	5907 A6	6904 D10	6908 D8	6912 D5	6917 E6	7904 E5	9902 A1
1905 A2	1909 A6	2902 D4	2906 D4	2910 D8	2914 E8	3901 B2	3905 D10	3909 E6	3914 D3	3918 D2	5904 E5	6901 D5	6905 D6	6909 D1	6914 E9	6918 D3	7905 E7	9904 B4
1906 D3	1910 B2	2903 D8	2907 D6	2911 E10	2915 E9	3902 D6	3906 D5	3910 E6	3915 D3	5901 A1	5905 D9	6902 D5	6906 D5	6910 D1	6915 E10	7901 D6	7906 D2	9905 B2
1907 A6	1911 A4	2904 D9	2908 E3	2912 E10	2920 D4	3903 D7	3907 D9	3911 E8	3916 D7	5902 D4	5906 A6	6903 D10	6907 D3	6911 D9	6916 E5	7902 D7	9901 A1	9906 D3



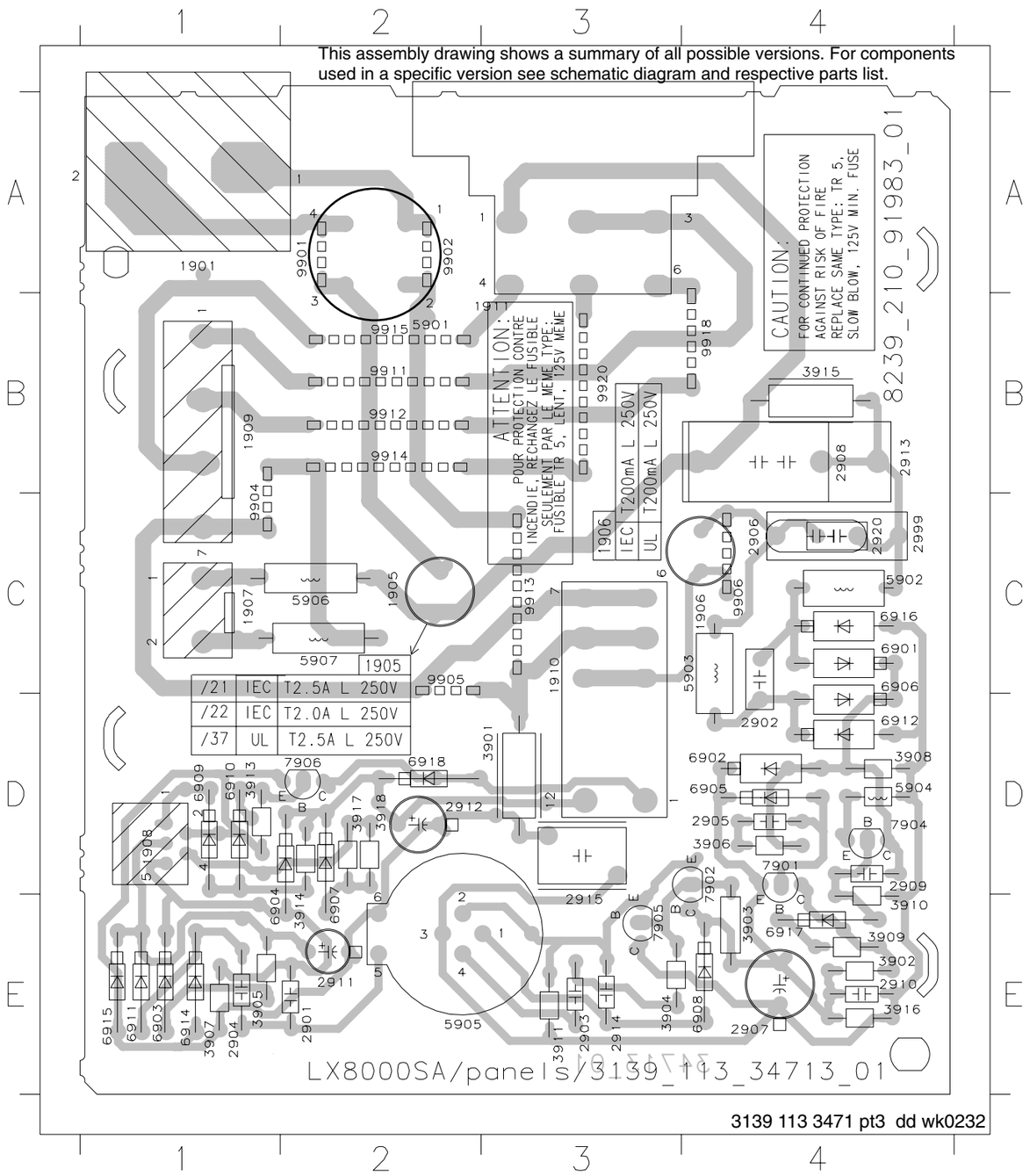
* PROVISION

Note : Some values may varies, see respective parts list for correct value.

3139 118 55560...8239_210_91983_01...for 3471 pt3 dd wk0232

MAIN BOARD - COMPONENT LAYOUT

1901 A1	2903 E3	2913 B4	3906 D4	3917 D2	6902 D4	6912 D4	7906 D2	9915 B2
1905 C2	2904 E1	2914 E3	3907 E1	3918 D2	6903 E1	6914 E1	9901 A2	9918 B4
1906 C4	2905 D4	2915 E3	3908 D4	5901 B2	6904 E1	6915 E1	9902 A2	9920 B3
1907 C1	2906 C4	2920 C4	3909 E4	5902 C4	6905 D4	6916 C4	9904 C1	
1908 D1	2907 E4	2999 C4	3910 E4	5903 C4	6906 C4	6917 E4	9905 C2	
1909 B1	2908 B4	3901 D3	3911 E3	5904 D4	6907 E2	6918 D2	9906 C4	
1910 C3	2909 D4	3902 E4	3913 D1	5905 E2	6908 E4	7901 D4	9911 B2	
1911 B3	2910 E4	3903 E4	3914 E2	5906 C2	6909 D1	7902 D4	9912 B2	
2901 E2	2911 E2	3904 E3	3915 B4	5907 C2	6910 D1	7904 D4	9913 C3	
2902 D4	2912 D2	3905 E1	3916 E4	6901 C4	6911 E1	7905 E3	9914 B2	


This assembly drawing shows a summary of all possible versions. For components used in a specific version see schematic diagram and respective parts list.
8239_210_91983_01
CAUTION: FOR CONTINUED PROTECTION AGAINST RISK OF FIRE REPLACE SAME TYPE: TR 5, SLOW BLOW, 125V MIN. FUSE
ATTENTION: POUR PROTECTION CONTRE INCENDIE, REMPLACEZ LE FUSIBLE SEULEMENT PAR LE MEME TYPE: FUSIBLE TR 5, LENT, 125V MEME
1906 IEC T200mA L 250V UL T200mA L 250V
1905
/21 IEC T2.5A L 250V
/22 IEC T2.0A L 250V
/37 UL T2.5A L 250V
LX8000SA/panels/3139_113_34713_01
3139 113 3471 pt3 dd wk0232

ELECTRICAL PARTS LIST - SUPPLY & MAIN BOARDS

MISCELLANEOUS

0012	4822 492 11735	SPRING TRANS	
1201	4822 071 55002	⚠ Fuse RAD LT 5A 250V	
1201	9965 000 07786	⚠ Fuse RAD LT 4A 250V	/22S
1202	4822 071 55002	⚠ Fuse RAD LT 5A 250V	
1202	9965 000 07786	⚠ Fuse RAD LT 4A 250V	/22S
1231	4822 267 51255	Flex Connector 14P	
1250	9965 000 07788	⚠ FUSE RAD LT 2A 250V	
1260	4822 267 10958	Flex Connector 5P	
1270	4822 267 51255	Flex Connector 14P	/22S
1271	2422 025 14526	Flex Connector 16P	/21R/37S
1901	4822 265 31015	⚠ Mains Socket	
1901	2422 030 00328	⚠ Mains Socket	/37S
1905	4822 071 52502	⚠ Fuse RAD LT 2,5A 250V	/21R
1905	9965 000 07788	⚠ Fuse RAD LT 2A 250V	/22S
1905	4822 253 50137	⚠ Fuse RAD LT 2,5A 250V	/37S
1906	4822 071 52001	⚠ Fuse RAD LT 200mA 250V	
1906	4822 252 51167	⚠ Fuse RAD LT200mA 250V	/37S
1907	4822 265 20723	Connector 2P VH	
1908	4822 267 10958	Flex Connector 5P	
1909	4822 267 10728	Connector 4P VH	/21R
1910	2422 132 07519	⚠ Relay 1P 12V 16A OZ-SS L	
1911	2422 129 16478	⚠ Voltage Selector 2P 5A	/21R

CAPACITORS

2205	4822 126 12785	47nF 50V	
2210	5322 121 42578	100nF 5% 250V	
2211	5322 121 42578	100nF 5% 250V	
2212	4822 124 80563	4700uF 20% 35V	
2213	4822 124 40207	100uF 20% 25V	
2214	4822 124 40769	4,7uF 20% 100V	
2215	4822 122 10577	3,3nF 10% 16V	
2216	4822 124 40433	47uF 20% 25V	
2217	4822 121 51387	10nF 20% 16V	
2218	4822 124 41584	100uF 20% 10V	
2219	4822 124 80791	470uF 16V 20%	
2230	2020 561 90365	100nF +80/-20% 50V	
2231	4822 124 40248	10uF 20% 63V	
2232	4822 124 21913	1uF 20% 63V	
2233	4822 124 80195	470uF 20% 10V	
2240	4822 124 40255	100uF 20% 63V	
2250	2020 012 93745	10000uF 20% 16V	
2251	2020 012 93745	10000uF 20% 16V	
2252	2020 561 90365	100nF +80/-20% 50V	
2253	4822 124 40248	10uF 20% 63V	
2254	4822 124 21913	1uF 20% 63V	
2262	4822 124 81144	1000uF 16V	/21R/37S
2263	4822 124 21913	1uF 20% 63V	/21R/37S
2290	4822 124 40255	100uF 20% 63V	
2291	4822 124 41584	100uF 20% 10V	
2292	4822 124 81151	22uF 50V	
2295	4822 124 40255	100uF 20% 63V	
2296	4822 124 41584	100uF 20% 10V	
2297	4822 124 81151	22uF 50V	
2901	2020 561 90365	100nF +80/-20% 50V	
2902	4822 121 43526	47nF 5% 250V	
2903	4822 126 12785	47nF 50V	
2904	2020 561 90365	100nF +80/-20% 50V	
2905	4822 121 51387	10nF 20% 16V	
2906	4822 121 40516	22nF 10% 250V	
2907	4822 124 40255	100uF 20% 63V	
2908	4822 121 10512	⚠ 220nF 20% 275V	/22S
2909	4822 121 51387	10nF 20% 16V	
2910	2020 561 90365	100nF +80/-20% 50V	
2911	4822 124 41584	100uF 20% 10V	
2912	4822 124 41643	100uF 20% 16V	
2913	4822 126 13589	⚠ 470nF 275V	/21R/37S
2914	4822 126 11714	4,7nF 20%	
2915	4822 126 14088	⚠ 2,2nF 20% 250V	

RESISTORS

3201	4822 052 10228	⚠ 2R2 5% 0,33W	
3201	4822 052 10478	⚠ 4R7 5% 0,33W	/22S
3203	4822 116 52269	3k3 5% 0,5W	
3204	4822 050 21003	10k 1% 0,6W	
3205	4822 116 52283	4k7 5% 0,5W	
3209	4822 052 10108	⚠ 1R 5% 0,33W	
3211	4822 116 52256	2k2 5% 0,5W	
3212	4822 116 52256	2k2 5% 0,5W	
3213	4822 116 83883	470R 5% 0,5W	
3214	4822 116 52206	120R 5% 0,5W	
3215	4822 116 52206	120R 5% 0,5W	
3216	4822 050 21003	10k 1% 0,6W	
3217	4822 050 11002	1k 1% 0,4W	
3218	4822 116 52238	12k 5% 0,5W	
3219	4822 116 52234	100k 5% 0,5W	
3220	4822 050 21003	10k 1% 0,6W	
3221	4822 116 52257	22k 5% 0,5W	
3222	4822 116 52228	680R 5% 0,5W	
3223	4822 116 52238	12k 5% 0,5W	
3224	4822 116 83884	47k 5% 0,5W	
3225	4822 116 83961	6k8 5%	
3226	4822 116 52207	1k2 5% 0,5W	
3227	4822 116 52207	1k2 5% 0,5W	
3228	4822 116 52207	1k2 5% 0,5W	
3230	4822 116 52276	3k9 5% 0,5W	
3231	4822 116 52276	3k9 5% 0,5W	
3232	4822 050 11002	1k 1% 0,4W	
3233	4822 116 83961	6k8 5%	
3234	4822 116 83881	390R 5% 0,5W	
3235	4822 116 83881	390R 5% 0,5W	
3236	4822 116 83881	390R 5% 0,5W	
3237	4822 116 83884	47k 5% 0,5W	
3238	4822 116 52238	12k 5% 0,5W	
3251	4822 116 52289	5k6 5% 0,5W	

8-6

ELECTRICAL PARTS LIST - SUPPLY & MAIN BOARDS

ELECTRICAL PARTS LIST - SUPPLY & MAIN BOARDS

RESISTORS

3252	4822 116 52231	820R 5% 0,5W	
3253	2322 193 14227	⚠ RST MFLM PR01 0R22 PM5	
3254	4822 116 83884	47k 5% 0,5W	
3261	4822 116 83961	6k8 5%	/21R/37S
3262	4822 116 83881	390R 5% 0,5W	/21R/37S
3263	4822 116 83881	390R 5% 0,5W	/21R/37S
3264	4822 116 83881	390R 5% 0,5W	/21R/37S
3265	4822 116 83884	47k 5% 0,5W	/21R/37S
3266	4822 116 52238	12k 5% 0,5W	/21R/37S
3289	4822 116 52238	12k 5% 0,5W	
3290	4822 116 52303	8k2 5% 0,5W	
3291	4822 116 83883	470R 5% 0,5W	
3292	4822 050 11002	1k 1% 0,4W	
3293	4822 116 52283	4k7 5% 0,5W	
3294	4822 050 21003	10k 1% 0,6W	
3295	4822 116 52303	8k2 5% 0,5W	
3296	4822 116 83883	470R 5% 0,5W	
3297	4822 050 21003	10k 1% 0,6W	
3901	4822 053 21106	⚠ 10M 5% 0,5W	/37S
3902	4822 050 21003	10k 1% 0,6W	
3903	4822 050 24705	4M7 1% 0,6W	
3904	4822 116 52219	330R 5% 0,5W	
3905	4822 116 52228	680R 5% 0,5W	
3906	4822 116 52234	100k 5% 0,5W	
3907	4822 050 23303	33k 1% 0,6W	
3908	4822 116 83866	1M 5% 0,5W	
3909	4822 116 83883	470R 5% 0,5W	
3910	4822 116 52256	2k2 5% 0,5W	
3911	4822 116 52234	100k 5% 0,5W	
3913	4822 116 83884	47k 5% 0,5W	
3914	4822 116 83884	47k 5% 0,5W	
3915	4822 053 20475	⚠ 4M7 5% 0,25W	
3916	4822 116 52272	330k 5% 0,5W	
3917	4822 116 52175	100R 5% 0,5W	
3918	4822 116 52175	100R 5% 0,5W	

COILS & FILTERS

5901	4822 157 11832	⚠ FIL MAINS 400uH
5902	4822 157 53473	Coil 1000uH 10%
5903	4822 157 53473	Coil 1000uH 10%
5904	4822 157 11228	Coil 100uH 5%
5905	2422 549 45157	⚠ Standby Transformer 3A1631N
5906	4822 157 11411	FXD IND BEAD 100MHz 80R
5907	4822 157 11411	FXD IND BEAD 100MHz 80R

DIODES

6201	4822 130 34173	BZX79-C5V6
6205	4822 130 30621	1N4148
6206	4822 130 30621	1N4148
6207	4822 130 34382	BZX79-C8V2
6210	4822 130 31878	1N4003G
6210	5322 130 80686	1N5392
6211	4822 130 31878	1N4003G
6211	5322 130 80686	1N5392
6212	4822 130 31878	1N4003G
6212	5322 130 80686	1N5392
6213	4822 130 31878	1N4003G
6213	5322 130 80686	1N5392
6215	4822 130 34488	BZX79-B11
6216	4822 130 34281	BZX79-C15
6217	4822 130 30621	1N4148
6218	4822 130 30621	1N4148
6230	4822 130 31878	1N4003G
6240	4822 130 31878	1N4003G
6250	9340 550 66112	BYV28-200/24
6251	9340 550 66112	BYV28-200/24
6252	4822 130 31878	1N4003G
6290	4822 130 31878	1N4003G
6291	4822 130 34173	BZX79-C5V6
6293	4822 130 34173	BZX79-C5V6
6294	4822 130 34278	BZX79-C6V8
6295	4822 130 31878	1N4003G
6296	4822 130 34173	BZX79-C5V6
6901	4822 130 31878	1N4003G
6902	4822 130 31878	1N4003G
6903	4822 130 30621	1N4148
6904	4822 130 30621	1N4148
6905	4822 130 30621	1N4148
6906	4822 130 31878	1N4003G
6907	4822 130 30621	1N4148
6908	4822 130 30621	1N4148
6909	4822 130 30621	1N4148
6910	4822 130 30621	1N4148
6911	4822 130 30621	1N4148
6912	4822 130 31878	1N4003G
6914	4822 130 30621	1N4148
6915	4822 130 34173	BZX79-C5V6
6916	4822 130 31878	1N4003G
6917	4822 130 34145	BZX79-C39
6918	4822 130 30621	1N4148

TRANSISTORS & INTEGRATED CIRCUITS

7201	4822 130 40959	BC547B
7210	9322 139 23687	⚠ TRA POW BDX53BFP
7211	4822 130 40959	BC547B
7212	4822 130 40959	BC547B
7213	4822 130 40959	BC547B
7214	4822 130 40959	BC547B
7215	4822 130 40995	BD438
7216	4822 130 40959	BC547B
7230	4822 209 81351	IC LM317P
7231	4822 130 40959	BC547B
7232	4822 130 40995	BD438
7250	4822 209 12335	IC L4941
7251	4822 130 40959	BC547B
7252	4822 130 40995	BD438
7260	4822 209 12335	IC L4941 /21R/37S
7261	4822 130 40959	BC547B /21R/37S
7262	4822 130 40995	BD438 /21R/37S
7290	4822 130 40995	BD438
7295	4822 130 63615	BD241BFP
7901	4822 130 44568	BC557B
7902	4822 130 40959	BC547B
7904	4822 130 40855	BC337-40
7905	4822 130 44568	BC557B
7906	4822 130 40981	BC337-25

Note : Only the parts mentioned in this list are normal service spare parts.

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POWER AMPLIFIER BOARD

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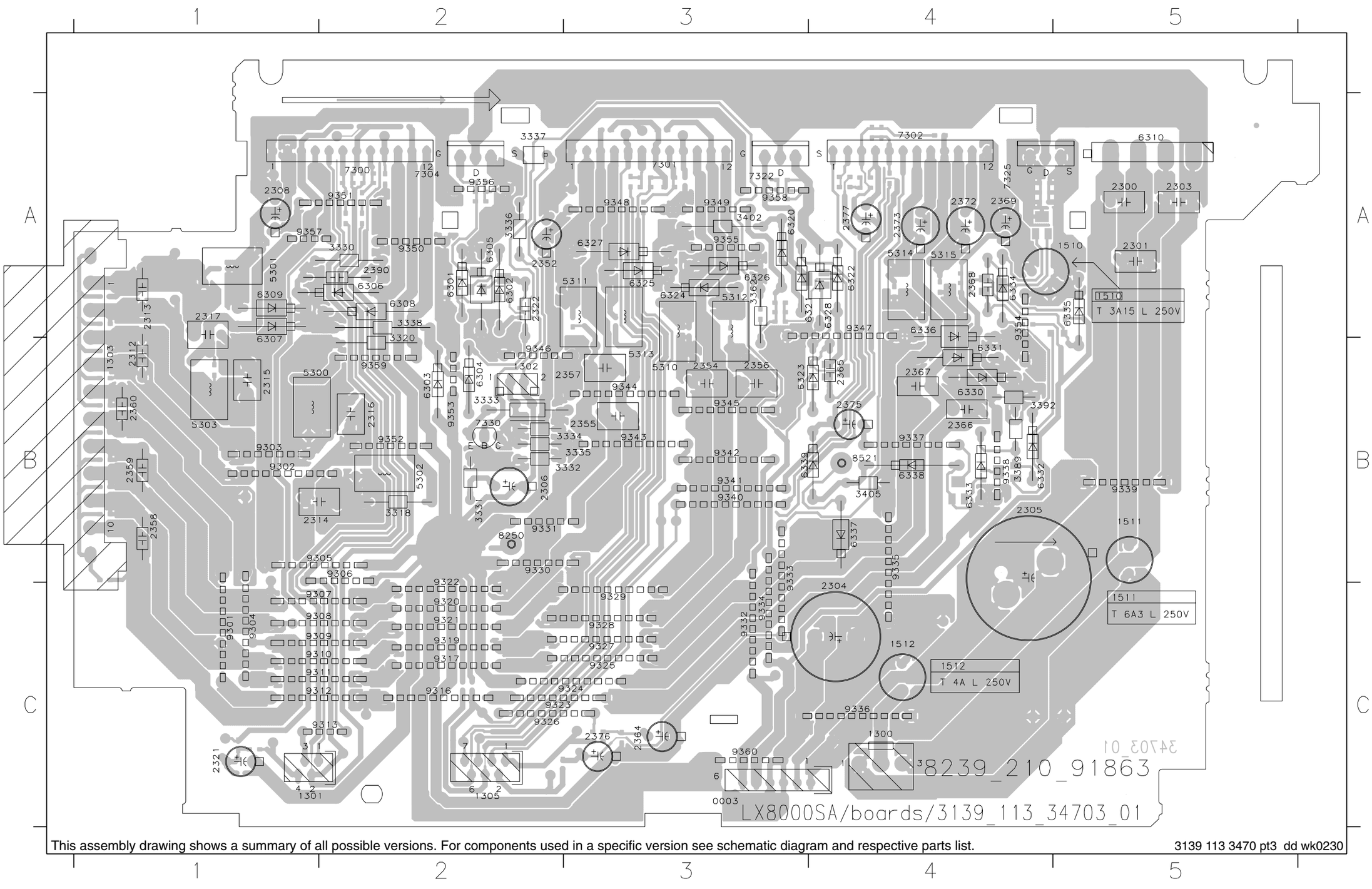
POWER AMPLIFIER BOARD - COMPONENT LAYOUT

0003 C3	2301 A5	2316 B2	2359 B1	2375 B4	3334 B3	5300 B1	6301 A2	6320 A3	6331 B4	7301 A3	9303 B1	9313 C2	9326 C2	9336 C4	9346 B2	9356 A2
1300 C4	2303 A5	2317 A1	2360 B1	2376 C3	3335 B3	5301 A1	6302 A2	6321 A4	6332 B4	7302 A4	9304 C1	9316 C2	9327 C3	9337 B4	9347 A4	9357 A1
1301 C1	2304 C4	2321 C1	2364 C3	2377 A4	3336 A2	5302 B2	6303 B2	6322 A4	6333 B4	7304 A2	9305 B2	9317 C2	9328 C3	9338 B4	9348 A3	9358 A3
1302 B2	2305 B4	2322 A2	2365 B4	2390 A2	3337 A2	5303 B1	6304 B2	6323 B3	6334 A4	7322 A3	9306 B2	9319 C2	9329 C3	9339 B5	9349 A3	9359 B2
1303 B1	2306 B2	2352 A2	2366 B4	3318 B2	3338 A2	5310 B3	6305 A2	6324 A3	6335 A5	7325 A4	9307 C1	9320 C2	9330 B2	9340 B3	9350 A2	9360 C3
1305 C2	2308 A1	2354 B3	2367 B4	3320 B2	3362 A3	5311 A3	6306 A2	6325 A3	6336 A4	7330 B2	9308 C1	9321 C2	9331 B2	9341 B3	9351 A2	
1510 A5	2312 B1	2355 B3	2368 A4	3330 A2	3389 B4	5312 A3	6307 B1	6326 A3	6337 B4	8250 B2	9309 C1	9322 B2	9332 C3	9342 B3	9352 B2	
1511 B5	2313 A1	2356 B3	2369 A4	3331 B2	3392 B4	5313 B3	6308 A2	6327 A3	6338 B4	8521 B4	9310 C1	9323 C2	9333 B3	9343 B3	9353 B2	
1512 C4	2314 B1	2357 B3	2372 A4	3332 B3	3402 A3	5314 A4	6309 A1	6328 A4	6339 B3	9301 C1	9311 C1	9324 C3	9334 C3	9344 B3	9354 A4	
2300 A5	2315 B1	2358 B1	2373 A4	3333 B2	3405 B4	5315 A4	6310 A5	6330 B4	7300 A2	9302 B1	9312 C1	9325 C3	9335 B4	9345 B3	9355 A3	



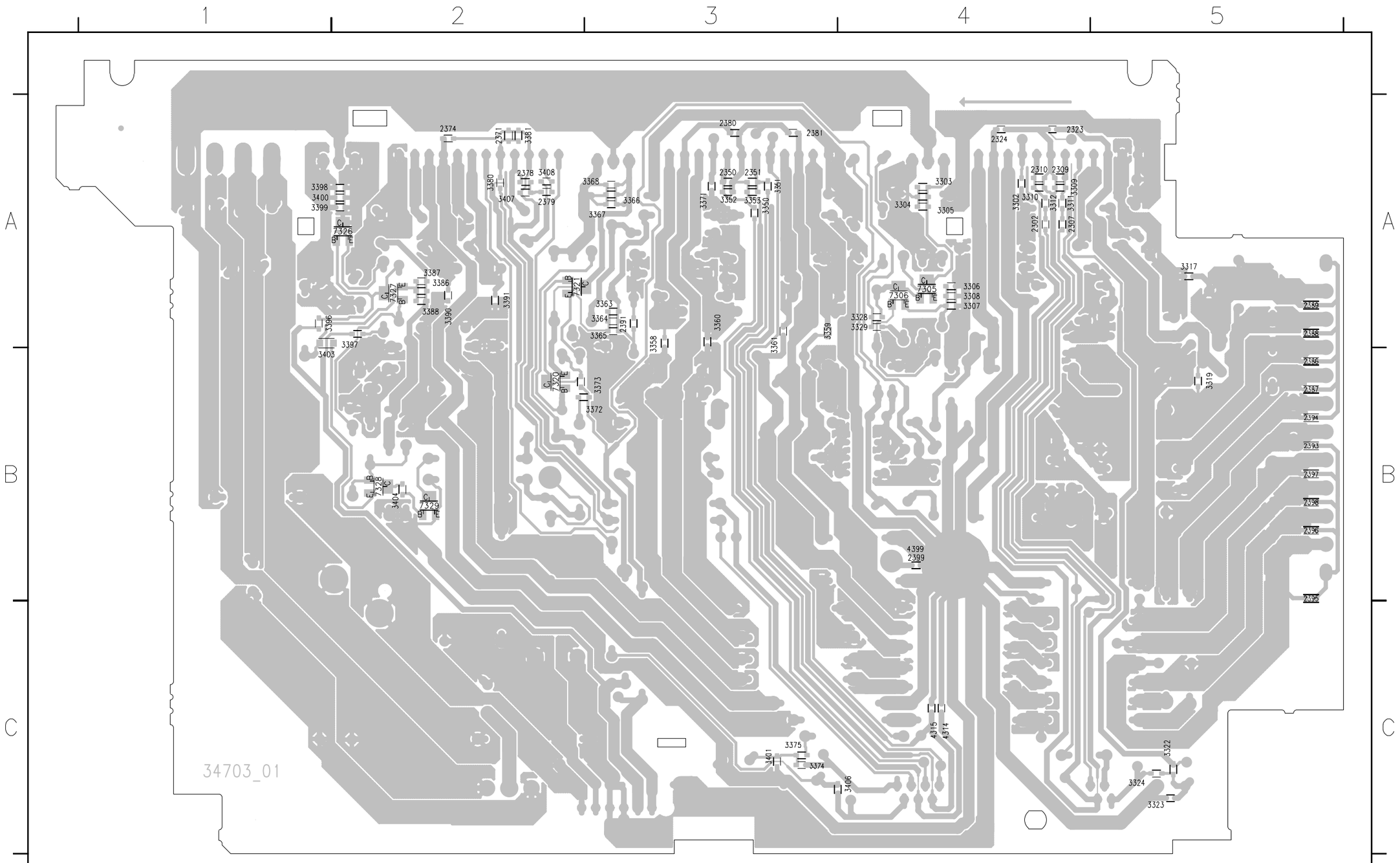
This assembly drawing shows a summary of all possible versions. For components used in a specific version see schematic diagram and respective parts list.

3139 113 3470 pt3 dd wk0230

9-3

POWER AMPLIFIER BOARD - CHIP LAYOUT

2302 A4	2350 A3	2380 A3	2391 A3	2398 B5	3306 A4	3312 A4	3328 A4	3358 A3	3365 A3	3373 B3	3387 A2	3398 A1	3406 C4	7305 A4	7328 B2
2307 A4	2351 A3	2381 A3	2393 B5	2399 B4	3307 A4	3317 A5	3329 A4	3359 A3	3366 A3	3374 C3	3388 A2	3399 A1	3407 A2	7306 A4	7329 B2
2309 A4	2371 A2	2386 B5	2394 B5	3302 A4	3308 A4	3319 B5	3350 A3	3360 A3	3367 A3	3375 C3	3390 A2	3400 A1	3408 A2	7320 B2	
2310 A4	2374 A2	2387 B5	2395 B5	3303 A4	3309 A4	3322 C5	3351 A3	3361 A3	3368 A3	3380 A2	3391 A2	3401 C3	4314 C4	7321 A2	
2323 A4	2378 A2	2388 A5	2396 B5	3304 A4	3310 A4	3323 C5	3352 A3	3363 A3	3371 A3	3381 A2	3396 A1	3403 B1	4315 C4	7326 A2	
2324 A4	2379 A2	2389 A5	2397 B5	3305 A4	3311 A4	3324 C5	3353 A3	3364 A3	3372 B3	3386 A2	3397 A2	3404 B2	4399 B4	7327 A2		



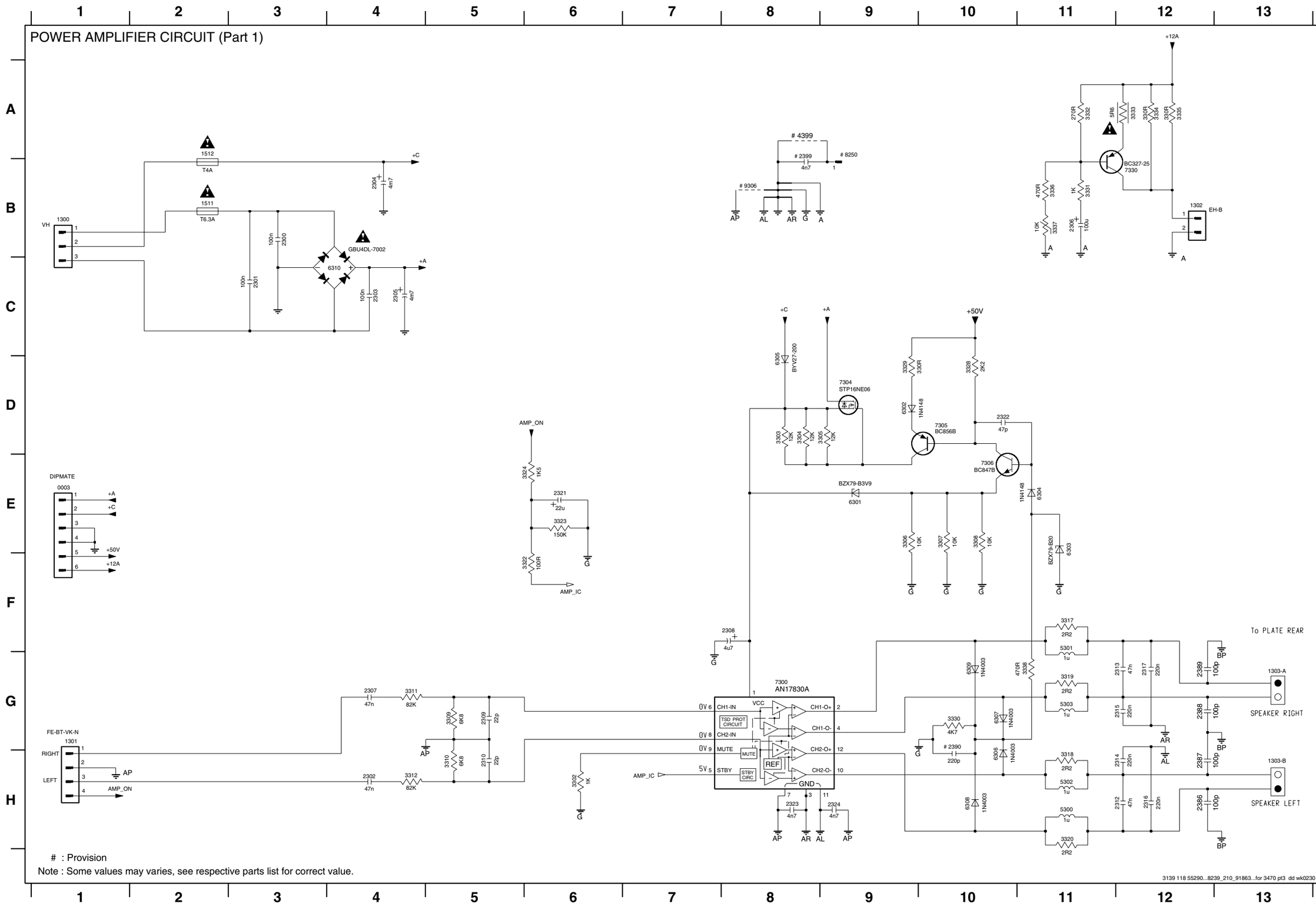
This assembly drawing shows a summary of all possible versions. For components used in a specific version see schematic diagram and respective parts list.

3139 113 3470 pt3 dd wk0230

9-4

POWER AMPLIFIER BOARD - CIRCUIT DIAGRAM (PART 1)

POWER AMPLIFIER CIRCUIT (Part 1)



: Provision

Note : Some values may varies, see respective parts list for correct value.

3139 118 55290...8239_210_91863...for 3470 pt3 dd wk0230

0003 E1
1300 B1
1301 G1
1302 B12
1303-A G13
1303-B H13
1511 B2
1512 A2
2300 B3
2301 C3
2302 H4
2303 C4
2304 B4
2305 C4
2306 B11
2307 G4
2308 F8
2309 G5
2310 H5
2312 H12
2313 G12
2314 H12
2315 G12
2316 H12
2317 G12
2321 E6
2322 D10
2323 H8
2324 H9
2386 H12
2387 H12
2388 G12
2389 G12
2390 G10
2399 A8
3302 H6
3303 D8
3304 D8
3305 D9
3306 E9
3307 E10
3308 E10
3309 G5
3310 H5
3311 G4
3312 H4
3317 F11
3318 H11
3319 G11
3320 H11
3322 F6
3323 E6
3324 E6
3328 D10
3329 D9
3330 G10
3331 B11
3332 A11
3333 A12
3334 A12
3335 A12
3336 B11
3337 B11
3338 G11
4399 A8
5300 H11
5301 F11
5302 H11
5303 G11
6301 E9
6302 D9
6303 E11
6304 E11
6305 D8
6306 H10
6307 G10
6308 H10
6309 G10
6310 C4
7300 G8
7304 D9
7305 D10
7306 E10
7330 B11
8250 A9
9306 B8

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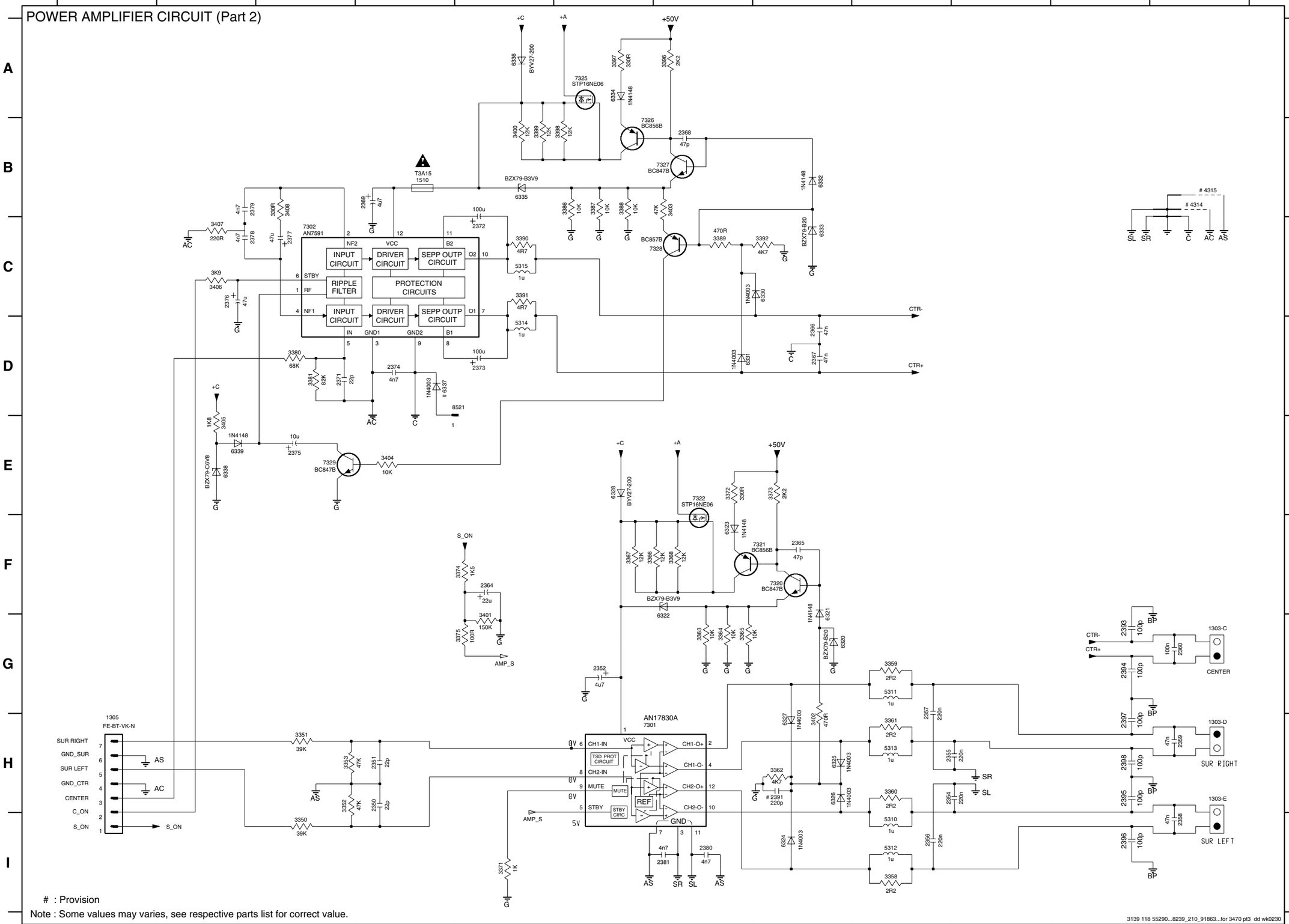
POWER AMPLIFIER BOARD - CIRCUIT DIAGRAM (PART 2)

POWER AMPLIFIER CIRCUIT (Part 2)



: Provision

Note : Some values may varies, see respective parts list for correct value.

3139 118 55290...8239_210_91863...for 3470 pt3 dd wk0230

1303-C G12
1303-D H12
1303-E H12
1305 H1
1510 B4
2350 H4
2351 H4
2352 G6
2354 H9
2355 H9
2356 I9
2357 G9
2358 I12
2359 H12
2360 G12
2364 F5
2365 F8
2366 D8
2367 D8
2368 B7
2369 B4
2371 D3
2372 C5
2373 D5
2374 D4
2375 E3
2376 C2
2377 C3
2378 C2
2379 B2
2380 I7
2381 I7
2391 H8
2393 G11
2394 G11
2395 H11
2396 I11
2397 H11
2398 H11
3350 I3
3351 H3
3352 H3
3353 H3
3358 I9
3359 G9
3360 H9
3361 H9
3362 H8
3363 G7
3364 G7
3365 G7
3366 F6
3367 F6
3368 F7
3371 I5
3372 E7
3373 E8
3374 F5
3375 G5
3380 D3
3381 D3
3386 B6
3387 B6
3388 B6
3389 C7
3390 C5
3391 C5
3392 C8
3396 A7
3397 A6
3398 B6
3399 B5
3400 B5
3401 F5
3402 H8
3403 B7
3404 E4
3405 E2
3406 C2
3407 C2
3408 B3
4314 B12
4315 B12
5310 I9
5311 G9
5312 I9
5313 H9
5314 D5
5315 C5
6320 G8
6321 G8
6322 F7
6323 F7
6324 I8
6325 H8
6326 H8
6327 H8
6328 E6
6330 C8
6331 D7
6332 B8
6333 C8
6334 A6
6335 B5
6336 A5
6337 D4
6338 E2
6339 E2
7301 H6
7302 C3
7320 F8
7321 F8
7322 E7
7325 A6
7326 A6
7327 B7
7328 C7
7329 E3
8521 D5

ELECTRICAL PARTS LIST - POWER AMPLIFIER BOARD

MISCELLANEOUS

0005	3139 114 75830	HOLDER IC AMP
1301	4822 267 10733	Flex Connector 4P
1303	2422 015 19764	Speaker Terminal Click 10P
1305	4822 267 10953	Flex Connector 7P
1510	4822 071 53152 ⚠	FUSE RAD LT 3,15A 250V
1511	4822 252 51123 ⚠	FUSE RAD LT 6,3A 250V
1512	9965 000 07786 ⚠	FUSE RAD LT 4A 250V

CAPACITORS

2300	5322 121 42386	100nF 5% 63V
2301	5322 121 42386	100nF 5% 63V
2302	3198 017 34730	47nF 16V
2303	5322 121 42386	100nF 5% 63V
2304	4822 124 12012	4700uF 20% 25V
2305	4822 124 80415	4700uF 20% 50V
2306	4822 124 40207	100uF 20% 25V
2307	3198 017 34730	47nF 16V
2308	4822 124 40769	4,7uF 20% 100V
2309	4822 122 33761	22pF 5% 50V
2310	4822 122 33761	22pF 5% 50V
2312	4822 126 12785	47nF 50V
2313	4822 126 12785	47nF 50V
2314	4822 121 42408	220nF 5% 63V
2315	4822 121 42408	220nF 5% 63V
2316	4822 121 42408	220nF 5% 63V
2317	4822 121 42408	220nF 5% 63V
2321	4822 124 81151	22uF 50V
2322	4822 122 33848	47pF 5% 50V
2323	4822 126 13193	4,7nF 10% 63V
2324	4822 126 13193	4,7nF 10% 63V
2350	4822 122 33761	22pF 5% 50V
2351	4822 122 33761	22pF 5% 50V
2352	4822 124 40769	4,7uF 20% 100V
2354	4822 121 42408	220nF 5% 63V
2355	4822 121 42408	220nF 5% 63V
2356	4822 121 42408	220nF 5% 63V
2357	4822 121 42408	220nF 5% 63V
2358	4822 126 12785	47nF 50V
2359	4822 126 12785	47nF 50V
2360	2020 561 90365	100nF +80/-20% 50V
2364	4822 124 81151	22uF 50V
2365	4822 122 33848	47pF 5% 50V
2366	4822 121 43526	47nF 5% 250V
2367	4822 121 43526	47nF 5% 250V
2368	4822 122 33848	47pF 5% 50V
2369	4822 124 40769	4,7uF 20% 100V
2371	4822 122 33761	22pF 5% 50V
2372	4822 124 40207	100uF 20% 25V
2373	4822 124 40207	100uF 20% 25V
2374	4822 126 13193	4,7nF 10% 63V
2375	4822 124 40248	10uF 20% 63V
2376	4822 124 40433	47uF 20% 25V
2377	4822 124 40433	47uF 20% 25V
2378	4822 126 13193	4,7nF 10% 63V
2379	4822 126 13193	4,7nF 10% 63V
2380	4822 126 13193	4,7nF 10% 63V
2381	4822 126 13193	4,7nF 10% 63V
2386	2020 552 94427	100pF 5% 50V
2387	2020 552 94427	100pF 5% 50V
2388	2020 552 94427	100pF 5% 50V
2389	2020 552 94427	100pF 5% 50V
2393	2020 552 94427	100pF 5% 50V
2394	2020 552 94427	100pF 5% 50V
2395	2020 552 94427	100pF 5% 50V
2396	2020 552 94427	100pF 5% 50V
2397	2020 552 94427	100pF 5% 50V
2398	2020 552 94427	100pF 5% 50V

RESISTORS

3302	4822 051 30102	1k 5% 0,062W
3303	4822 051 30123	12k 5% 0,062W
3304	4822 051 30123	12k 5% 0,062W
3305	4822 051 30123	12k 5% 0,062W
3306	4822 051 30103	10k 5% 0,062W
3307	4822 051 30103	10k 5% 0,062W
3308	4822 051 30103	10k 5% 0,062W
3309	4822 051 30682	6k8 5% 0,062W
3310	4822 051 30682	6k8 5% 0,062W
3311	4822 117 12864	82k 5% 0,6W
3312	4822 117 12864	82k 5% 0,6W
3317	4822 117 13613	2R2 5%
3318	4822 116 81154	2R2 5% 0,5W
3319	4822 117 13613	2R2 5%
3320	4822 116 81154	2R2 5% 0,5W
3322	4822 051 30101	100R 5% 0,062W
3323	4822 051 30154	150k 5% 0,062W
3324	4822 051 30152	1k5 5% 0,062W
3328	4822 051 30222	2k2 5% 0,062W
3329	4822 051 30331	330R 5% 0,062W
3330	4822 116 52283	4k7 5% 0,5W
3331	4822 050 11002	1k 1% 0,4W
3332	4822 116 83876	270R 5% 0,5W
3333	4822 052 10568 ⚠	5R6 5% 0,33W
3334	4822 116 52219	330R 5% 0,5W
3335	4822 116 52219	330R 5% 0,5W
3336	4822 116 83883	470R 5% 0,5W
3337	4822 117 12063	NTC DC 5W 10k 5%
3338	4822 116 83883	470R 5% 0,5W
3350	4822 051 30393	39k 5% 0,062W
3351	4822 051 30393	39k 5% 0,062W
3352	4822 117 12925	47k 1% 0,063W
3353	4822 117 12925	47k 1% 0,063W
3358	4822 117 13613	2R2 5%
3359	4822 117 13613	2R2 5%
3360	4822 117 13613	2R2 5%
3361	4822 117 13613	2R2 5%
3362	4822 116 52283	4k7 5% 0,5W
3363	4822 051 30103	10k 5% 0,062W
3364	4822 051 30103	10k 5% 0,062W
3365	4822 051 30103	10k 5% 0,062W
3366	4822 051 30123	12k 5% 0,062W
3367	4822 051 30123	12k 5% 0,062W
3368	4822 051 30123	12k 5% 0,062W
3371	4822 051 30102	1k 5% 0,062W
3372	4822 051 30331	330R 5% 0,062W
3373	4822 051 30222	2k2 5% 0,062W
3374	4822 051 30152	1k5 5% 0,062W
3375	4822 051 30101	100R 5% 0,062W
3380	4822 051 30683	68k 5% 0,062W
3381	4822 117 12864	82k 5% 0,6W
3386	4822 051 30103	10k 5% 0,062W
3387	4822 051 30103	10k 5% 0,062W
3388	4822 051 30103	10k 5% 0,062W
3389	4822 116 83883	470R 5% 0,5W
3390	4822 117 13608	4,7R 5% 0,0016W
3391	4822 117 13608	4,7R 5% 0,0016W
3392	4822 116 52283	4k7 5% 0,5W
3396	4822 051 30222	2k2 5% 0,062W
3397	4822 051 30331	330R 5% 0,062W
3398	4822 051 30123	12k 5% 0,062W
3399	4822 051 30123	12k 5% 0,062W
3400	4822 051 30123	12k 5% 0,062W
3401	4822 051 30154	150k 5% 0,062W
3402	4822 116 83883	470R 5% 0,5W
3403	4822 117 10834	47k 1% 0,1W
3404	4822 051 30103	10k 5% 0,062W
3405	4822 116 52249	1k8 5% 0,5W
3406	4822 051 30392	3k9 5% 0,063W
3407	4822 051 30221	220R 5% 0,062W
3408	4822 051 30331	330R 5% 0,062W

COILS & FILTERS

5300	4822 157 62255	Coil 18,5 Turns
5301	4822 157 62255	Coil 18,5 Turns
5302	4822 157 62255	Coil 18,5 Turns
5303	4822 157 62255	Coil 18,5 Turns
5310	4822 157 62255	Coil 18,5 Turns
5311	4822 157 62255	Coil 18,5 Turns
5312	4822 157 62255	Coil 18,5 Turns
5313	4822 157 62255	Coil 18,5 Turns
5314	4822 157 62255	Coil 18,5 Turns
5315	4822 157 62255	Coil 18,5 Turns

DIODES

6301	3198 010 53980	DIO REG BZX79-B3V9
6302	4822 130 30621	1N4148
6303	4822 130 34499	BZX79-B20
6304	4822 130 30621	1N4148
6305	5322 130 31938	BYV27-200
6306	4822 130 31878	1N4003G
6307	4822 130 31878	1N4003G
6308	4822 130 31878	1N4003G
6309	4822 130 31878	1N4003G
6310	9322 138 05667 ⚠	BRIDGE GBU4DL-7002
6320	4822 130 34499	BZX79-B20
6321	4822 130 30621	1N4148
6322	3198 010 53980	DIO REG BZX79-B3V9
6323	4822 130 30621	1N4148
6324	4822 130 31878	1N4003G
6325	4822 130 31878	1N4003G
6326	4822 130 31878	1N4003G
6327	4822 130 31878	1N4003G
6328	5322 130 31938	BYV27-200
6330	4822 130 31878	1N4003G
6331	4822 130 31878	1N4003G
6332	4822 130 30621	1N4148
6333	4822 130 34499	BZX79-B20
6334	4822 130 30621	1N4148
6335	3198 010 53980	DIO REG BZX79-B3V9
6336	5322 130 31938	BYV27-200
6338	4822 130 34278	BZX79-C6V8
6339	4822 130 30621	1N4148

TRANSISTORS & INTEGRATED CIRCUITS

7300	9322 174 32682	IC AN17830A
7301	9322 174 32682	IC AN17830A
7302	9322 153 02682	IC AN7591
7304	4822 130 11336	STP16NE06FP
7305	4822 130 60373	BC856B
7306	5322 130 60159	BC847B
7320	5322 130 60159	BC847B
7321	4822 130 60373	BC856B
7322	4822 130 11336	STP16NE06FP
7325	4822 130 11336	STP16NE06FP
7326	4822 130 60373	BC856B
7327	5322 130 60159	BC847B
7328	4822 130 60373	BC857B
7329	5322 130 60159	BC847B
7330	4822 130 41246	BC327-25

Note : Only the parts mentioned in this list are normal service spare parts.

AVC BOARD

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10-1

Brief introduction of the AVC (Audio, Video and Control) Board

The AVC Board consists of the Microprocessor of the set, eeprom, RDS decoder, back light control, video buffer and the following:

a. IC CS4362
A 6 channel DAC IC CS4362 which interfaces with the DVD module. It accepts PCM data at sample rates from 4kHz to 192kHz and DSD audio data. It has 6 differential outputs. The outputs are fed into opm ampifiers for equlization and conversion into single end outputs.

b. IC TDA7468
IC TDA7468 which includes functions such as source selection, sound control, volume control and muting function. Sound features such as DSC and IS are controllable via I2C Bus from the microprocessor. The IC caters for 4 input sources, namely TUNER, DVD, TV IN and MUX IN.
MUX IN is further multiplexed between AUX IN and DIGITAL IN by IC HEF4053BT. Input networks are included to provide appropriate attenuation for various sources.

c. Scart output
Scart output for audio/video connection to TV (Not in all versions).

d. Line out
Line out with cinch socket for connection to external amplifier.

e. Center out
Center out with cinch socket for connection to active center speaker.

f. Subwoofer output
Subwoofer output with cinch socket for connection to active subwoofer speaker.

g. Headphone Amplifier
Headphone Amplifier to drive 32 ohm to 1 kohm headphone.
The Headphone socket is not situated in this AVC Board but in Key & Control Board.

h. Digital out
Digital out with cinch socket for connection to Digital in of other audio equipment.

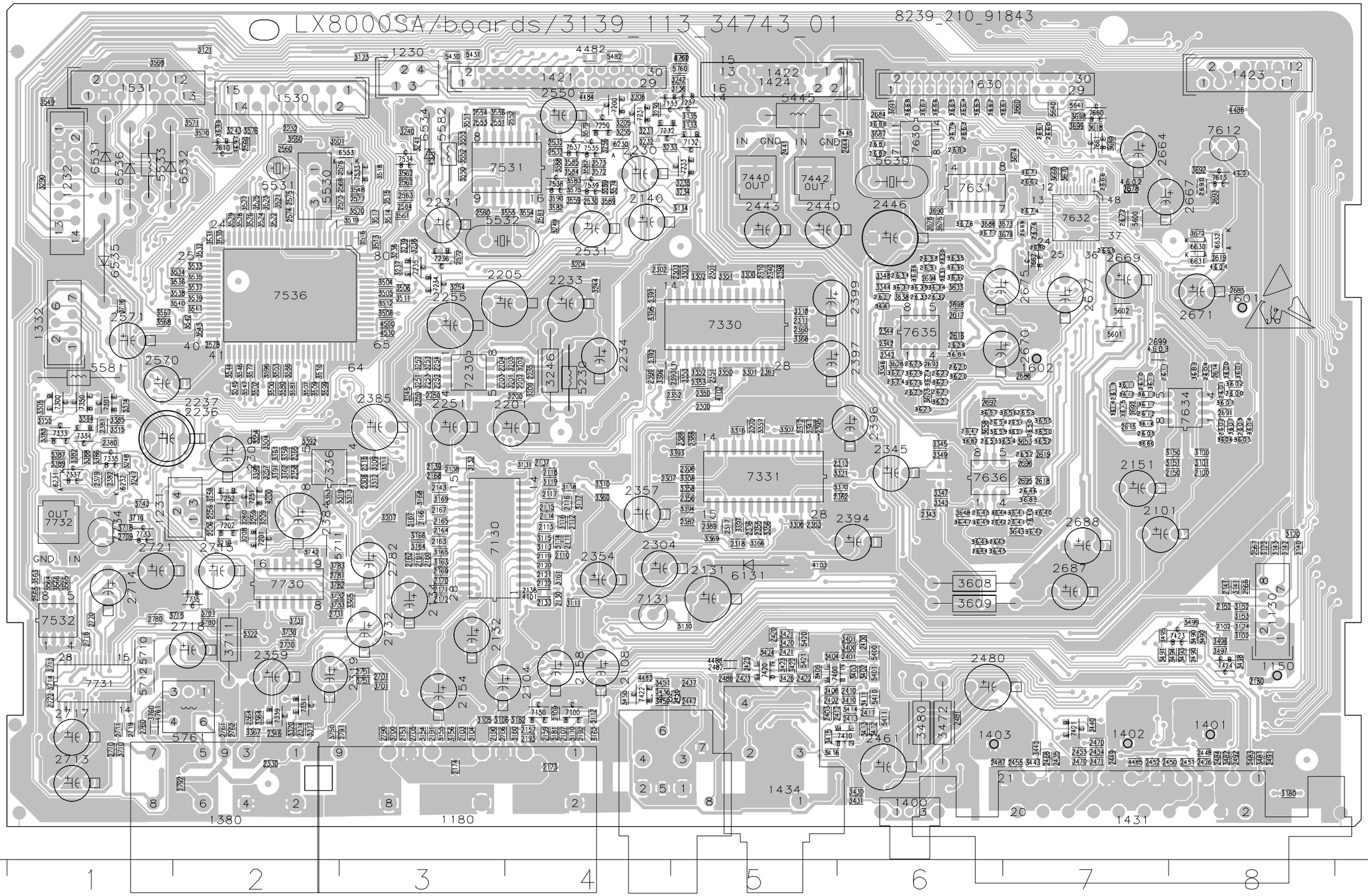
i. Digital in
Digital in with cinch socket for connection to Digital out of other audio equipment.

j. YUV out
YUV out with cinch socket for connection to TV (Not in all versions).

10-2

AVC BOARD - TOP VIEW LAYOUT

This assembly drawing shows a summary of all possible versions. For components used in a specific version see schematic diagram and respective parts list. 3139 113 3474 pt3 dd wk0232



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AVC BOARD - TOP VIEW LAYOUT (MAPPING)

1130 D8	1400 E6	1424 A5	1602 C7	2134 D3	2230 A4	2255 B3	2359 D2	2440 B5	2570 C1	2675 B7	2717 E1	3480 E6	5531 B2	6131 D5	7612 A8
1150 E8	1401 E8	1430 E4	1630 A6	2140 B4	2231 B3	2304 D4	2384 D2	2443 B5	2571 B1	2677 B7	2718 D2	3608 D6	5532 B3	6531 A1	7734 D1
1180 E3	1402 E7	1431 E7	2101 D7	2151 C7	2233 B4	2309 C2	2385 C3	2446 B6	2664 A7	2687 D7	2721 D1	3609 D6	5533 B1	6532 B1	
1230 A3	1403 E6	1434 E5	2104 E4	2154 E3	2234 C4	2319 E3	2394 D6	2461 E6	2667 B8	2688 D7	2732 D3	3711 D2	5581 C1	6534 A3	
1231 D1	1421 A4	1530 A2	2108 E4	2158 E4	2236 C1	2345 C6	2396 C6	2480 D6	2669 B7	2713 E1	2782 D3	5230 C4	5582 A3	6535 B1	
1232 B1	1422 A5	1531 A1	2131 D5	2201 C4	2237 C1	2354 D4	2397 C6	2531 B4	2670 C7	2714 D1	3246 C4	5445 A5	5630 A6	6536 B1	
1332 B1	1423 A8	1601 B8	2132 D3	2205 B3	2251 C3	2357 C4	2399 B6	2550 A4	2671 B8	2715 D2	3472 E6	5530 B2	5761 E2	7131 D4	
2100 C8	2193 E4	2379 C1	2487 E6	2625 C6	2697 C6	3135 A5	3243 A2	3351 B5	3420 D5	3521 B2	3573 A4	3632 B6	3682 C6	4501 A3	7251 D2
2102 D8	2200 C4	2380 C1	2490 D8	2626 C6	2698 B6	3136 A5	3244 B4	3352 C5	3421 D5	3522 B2	3574 B4	3633 B6	3683 C8	4530 C3	7252 D2
2103 E3	2202 C4	2381 C1	2491 E8	2627 B6	2699 C7	3140 D8	3245 C3	3353 C5	3422 E5	3523 B2	3575 B4	3634 B6	3684 C6	4601 B8	7300 C1
2107 E4	2203 C3	2382 C1	2492 E8	2630 B6	2701 E3	3141 D8	3247 C1	3354 C2	3423 E5	3524 B2	3576 A2	3635 B6	3685 D7	4602 B7	7301 C1
2109 E4	2204 C3	2386 C5	2530 B4	2631 B6	2705 E3	3142 D8	3248 C1	3355 C1	3424 D5	3525 B2	3577 C2	3636 B6	3686 B6	4603 C7	7330 B5
2110 D4	2206 D2	2387 D5	2532 A4	2632 B6	2706 E3	3143 D8	3249 B4	3356 D5	3425 E5	3526 B2	3579 A4	3637 B6	3687 A6	4604 B8	7331 C5
2111 D4	2232 A2	2388 C5	2533 A4	2633 B6	2709 D1	3150 C8	3250 C3	3357 C5	3426 E5	3527 B2	3580 C2	3638 B6	3688 A6	4760 A5	7333 C1
2112 D4	2235 C4	2389 D5	2551 A3	2634 B6	2710 E1	3151 C8	3251 C3	3358 C5	3430 E6	3528 B2	3581 C2	3639 B6	3689 A7	4761 E1	7334 C1
2113 D4	2250 C3	2390 C4	2552 A4	2635 B6	2711 E1	3152 D8	3252 C3	3359 C2	3431 E6	3529 B2	3582 B4	3640 D7	3690 B6	5400 D6	7335 C1
2114 D4	2252 C3	2391 B4	2553 A3	2640 D7	2716 D1	3153 D8	3253 C3	3360 D4	3440 E7	3530 B2	3583 B4	3641 D7	3691 A6	5401 E6	7336 C2
2115 D4	2253 C3	2392 C4	2554 A3	2641 D7	2719 E1	3154 E3	3254 B3	3361 C2	3442 E7	3531 B2	3584 B4	3642 D7	3692 B8	5410 E6	7337 C1
2116 D4	2254 C3	2393 C5	2560 A2	2642 D6	2720 D1	3155 E3	3255 A4	3362 C2	3443 E7	3532 B2	3585 A4	3643 D7	3693 B8	5411 E6	7339 E2
2117 C4	2256 D2	2395 C5	2562 B3	2643 D6	2722 E1	3156 E3	3256 A4	3363 D2	3450 E4	3533 B2	3586 C2	3644 D6	3696 A2	5420 D5	7350 C1
2118 C4	2300 C5	2398 B5	2563 B3	2644 D6	2730 D2	3160 E4	3257 C2	3364 E2	3451 E4	3534 B2	3587 B4	3645 D6	3697 A2	5421 E5	7351 E2
2119 D4	2301 B5	2400 D6	2564 B3	2645 D6	2731 D2	3161 D4	3258 D2	3365 D3	3452 E4	3535 B2	3588 B4	3646 D6	3698 A7	5430 A3	7400 E5
2120 D4	2302 B4	2401 D6	2565 D1	2646 C7	2751 E3	3162 E4	3259 D2	3366 D5	3470 E7	3536 B2	3589 B4	3647 D6	3699 A7	5431 A3	7410 E6
2121 D4	2303 B5	2402 E5	2566 D8	2647 C6	2760 E1	3163 D3	3260 D2	3367 E2	3471 E7	3537 B2	3590 B4	3648 D6	3700 E3	5482 A4	7420 E5
2122 D4	2305 C5	2403 E5	2567 D8	2650 C7	2761 E2	3164 D3	3290 B1	3368 C5	3481 E8	3538 B2	3596 C2	3649 D6	3701 E3	5600 B7	7421 E7
2130 D4	2306 C5	2410 E6	2568 B3	2651 C7	2762 E2	3165 D3	3300 B5	3369 D5	3482 E8	3539 B2	3598 A1	3650 C7	3710 E1	5601 C7	7422 E4
2133 D4	2307 C4	2411 E6	2569 A2	2652 C7	2780 D1	3166 D3	3301 C5	3370 C6	3490 D8	3540 B2	3599 C2	3651 C7	3713 E1	5602 B7	7423 D8
2136 D4	2308 C3	2412 E6	2572 B3	2653 C7	2781 D2	3167 D3	3302 B5	3382 C1	3491 D7	3541 B2	3600 C8	3652 C7	3714 E1	5640 A7	7424 E8
2137 C4	2310 B5	2413 E6	2573 B3	2654 C6	2790 E3	3168 D3	3303 B5	3383 C1	3492 D8	3542 B2	3601 C8	3653 C7	3715 D2	5641 A7	7440 B5
2138 C3	2311 B5	2420 D5	2574 B2	2655 C6	2791 E3	3169 D3	3304 C2	3384 C1	3493 D8	3543 C2	3602 C8	3654 C7	3716 B1	5710 D1	7442 B5
2139 C3	2312 C5	2421 D5	2575 B2	2656 B7	2792 E2	3180 E8	3305 C1	3385 C1	3494 D8	3544 C2	3603 C8	3655 C7	3718 D1	5711 D2	7531 B4
2141 D8	2313 C6	2422 E5	2576 B3	2660 A7	3100 C8	3181 E4	3306 D5	3386 C1	3495 D7	3545 C2	3604 C8	3656 C7	3719 D1	5712 E1	7532 D1
2143 C3	2314 E2	2423 E5	2577 B3	2661 A7	3101 C8	3182 E4	3307 C5	3387 C1	3496 D8	3546 C2	3605 C8	3657 C6	3730 D2	5760 A5	7533 B3
2150 C8	2315 C3	2426 E8	2578 C2	2662 B7	3102 D8	3200 C4	3308 C5	3388 C1	3497 D8	3547 C2	3606 C8	3658 C6	3731 D2	6230 A4	7534 A3
2152 D8	2316 D5	2435 E7	2580 B3	2663 A6	3104 E3	3201 C4	3309 C3	3389 C1	3498 E8	3548 B3	3607 C8	3659 C6	3732 D2	6231 C1	7535 A4
2153 E3	2317 D5	2436 E4	2581 B4	2665 B7	3105 E3	3202 C4	3310 C4	3390 C2	3499 D8	3549 A1	3610 C7	3660 A7	3733 D2	6232 C1	7536 B2
2157 E4	2318 D5	2437 E5	2600 C8	2666 B7	3106 E3	3203 C4	3311 C3	3391 C2	3500 C2	3550 B3	3611 C7	3661 A7	3742 D2	6533 A3	7537 A4
2159 E4	2330 E2	2441 A5	2601 C8	2672 B7	3110 E4	3204 B4	3312 C3	3392 C2	3501 A2	3551 A3	3612 C7	3662 A6	3743 D1	6630 B8	7538 B4
2160 D3	2340 B5	2444 A6	2602 C8	2674 B7	3111 D4	3205 A4	3313 D3	3393 C5	3502 C2	3552 A3	3613 C7	3663 A6	3750 E2	6631 B8	7539 B4
2161 D3	2341 C5	2445 A6	2603 C8	2676 B7	3112 E4	3206 A4	3314 C1	3394 D5	3503 C2	3553 A3	3614 C7	3664 A6	3751 E3	6632 B8	7610 A2
2162 D3	2342 C6	2447 E5	2604 C8	2678 B7	3113 D4	3207 D3	3315 C1	3395 B4	3504 B3	3554 B4	3615 C7	3665 A6	3760 E1	7100 E4	7613 B8
2163 D3	2343 D6	2448 E8	2605 C7	2679 A6	3114 D4	3208 D2	3316 C5	3396 C4	3505 B3	3555 B4	3616 C7	3666 A6	3761 A5	7130 D3	7630 A6
2164 D3	2344 C6	2449 E7	2610 C7	2680 B7	3115 D4	3209 D2	3317 E2	3397 D5	3506 B3	3556 A3	3617 C7	3667 A6	3780 D2	7132 A5	7631 B6
2165 D3	2346 E2	2450 E8	2611 C7	2681 A6	3116 D4	3210 D2	3318 B5	3400 D6	3507 C2	3559 B4	3618 A7	3668 A6	3781 D2	7133 A4	7632 B7
2166 D3	2350 C5	2451 E8	2612 C7	2682 A6	3117 D4	3230 A4	3319 D3	3401 D6	3508 B3	3560 A2	3619 B8	3669 B7	3782 D2	7150 E4	7634 C8
2167 D3	2351 C5	2452 E7	2613 C7	2683 A6	3118 C4	3231 A4	3320 E2	3402 E6	3509 C2	3561 B3	3620 C6	3670 B7	3783 D2	7200 A4	7635 C6
2168 C3	2352 C5	2453 E7	2614 C8	2684 A6	3119 C4	3232 A4	3321 C6	3403 E6	3510 C2	3562 B3	3621 C6	3671 B7	4101 D4	7201 D2	7636 C6
2169 D3	2353 C5	2454 E7	2615 C7	2685 B8	3120 D8	3233 A4	3322 D2	3404 D5	3511 B3	3563 D1	3622 C6	3672 B8	4102 C5	7202 D2	7660 A7
2170 D3	2355 D5	2455 E7	2616 C6	2686 C7	3121 A2	3234 B5	3342 C6	3405 E5	3512 B3	3564 D1	3623 C6	3673 B7	4103 D5	7230 C3	7661 A7
2171 D3	2356 D5	2456 E5	2617 B6	2689 B7	3122 D8	3235 B5	3343 D6	3406 E5	3513 B3	3565 D1	3624 C6	3674 A7	4200 D2	7231 A4	7662 B7
2172 D3	2358 C2	2466 E7	2618 C7	2690 B8	3123 A3	3236 B3	3344 B6	3410 E6	3514 B3	3566 D1	3625 C6	3675 B6	4482 A4	7232 A4	7730 D2
2173 E4	2360 C5	2470 E7	2619 C7	2691 C8	3124 D8	3237 B3	3345 C6	3411 E6	3515 B3	3567 B1	3626 C6	3676 B6	4483 E4	7233 B5	7731 E1
2174 E3	2361 C5	2481 E6	2620 C6	2692 C7	3130 D5	3238 B3	3346 C6	3412 E6	3516 B3	3568 B1	3627 C6	3677 B6	4484 A4	7234 B3	7732 D1
2180 E8	2362 D6	2482 E5	2621 C6	2693 C6	3131 C4	3239 B3	3347 C6	3413 E6	3517 B3	3569 B4	3628 C6	3678 B6	4485 E7	7235 B3	7733 D1
2190 E3	2363 D5	2483 E8	2622 C6	2694 B6	3132 C3	3240 A3	3348 B6	3414 E6	3518 B3	3570 A2	3629 C6	3679 B7	4486 A8	7236 B3	7735 D2
2191 E3	2364 E2	2484 E8	2623 C6	2695 C7	3133 A5	3241 A3	3349 C6	3415 E5	3519 B3	3571 A2	3630 B6	3680 C7	4488 E5	7237 A5	
2192 E4	2365 C2	2486 E5	2624 C6	2696 C7	3134 B5	3242 A5	3350 C5	3416 E5	3520 B3	3572 B4	3631 B6	3681 B6	4500 B3	7250 A4	

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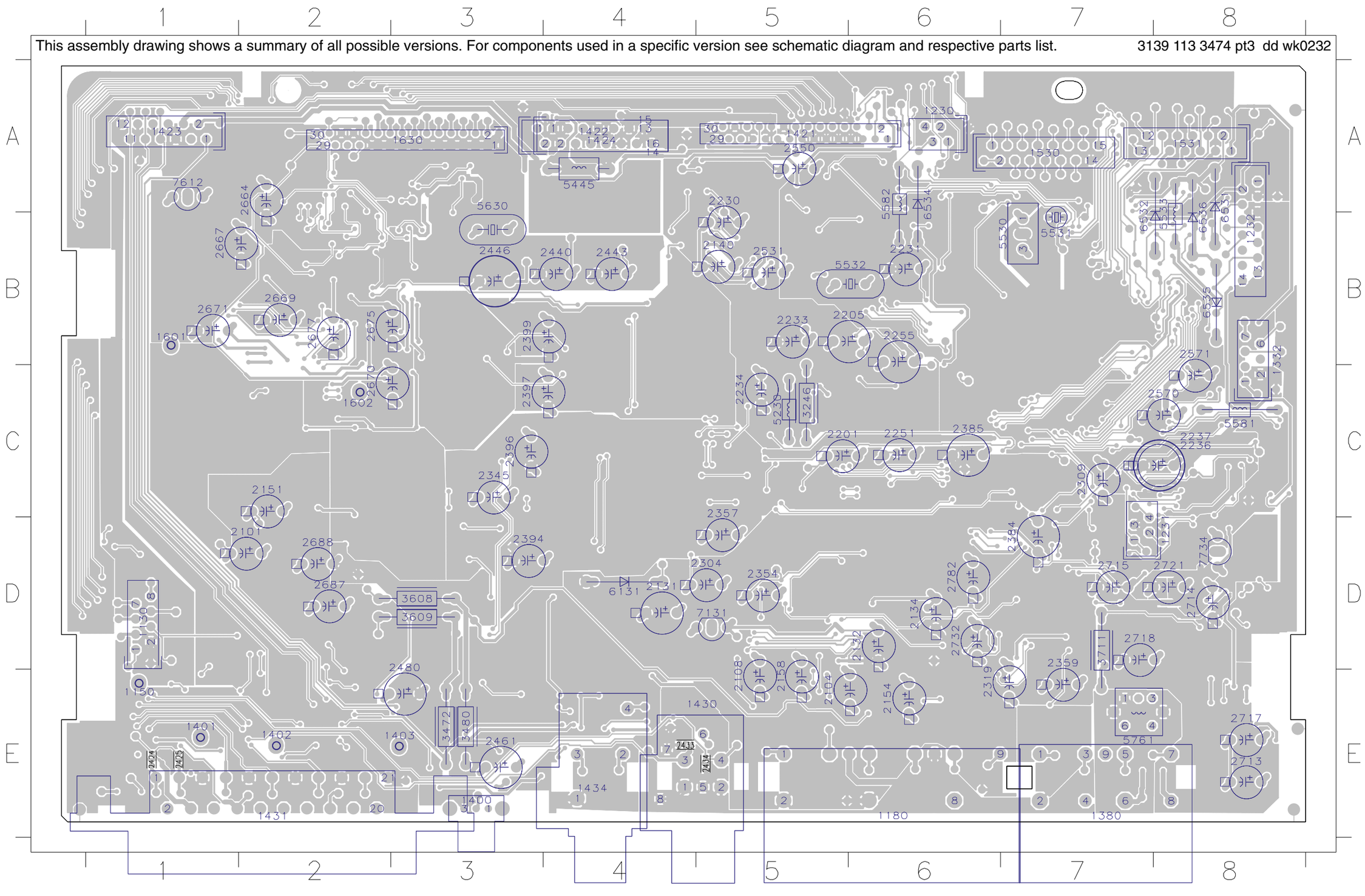
AVC BOARD - BOTTOM VIEW LAYOUT

1130 D1	1400 E3	1424 A4	1602 C2	2134 D6	2230 A5	2255 B6	2359 D7	2424 E1	2461 E3	2667 B1	2688 D2	2732 D6	3711 D7	5581 C8	6534 A6
1150 E1	1401 E1	1430 E5	1630 A3	2140 B5	2231 B6	2304 D5	2384 D7	2425 E1	2480 D3	2669 B2	2713 E8	2782 D6	5230 C5	5582 A6	6535 B8
1180 E6	1402 E2	1431 E2	2101 D2	2151 C2	2233 B5	2309 C7	2385 C6	2433 E4	2531 B5	2670 C2	2714 D8	3246 C5	5445 A4	5630 A3	6536 B8
1230 A6	1403 E3	1434 E4	2104 E5	2154 E6	2234 C5	2319 E6	2394 D3	2434 E5	2550 A5	2671 B1	2715 D7	3472 E3	5530 B7	5761 E7	7131 D5
1231 D8	1421 A5	1530 A7	2108 E5	2158 E5	2236 C8	2345 C3	2396 C3	2440 B4	2570 C8	2675 B2	2717 E8	3480 E3	5531 B7	6131 D4	7612 A1
1232 B8	1422 A4	1531 A8	2131 D4	2201 C5	2237 C8	2354 D5	2397 C3	2443 B4	2571 B8	2677 B2	2718 D7	3608 D3	5532 B6	6531 A8	7734 D8
1332 B8	1423 A1	1601 B1	2132 D6	2205 B6	2251 C6	2357 C5	2399 B3	2446 B3	2664 A2	2687 D2	2721 D8	3609 D3	5533 B8	6532 B8	

This assembly drawing shows a summary of all possible versions. For components used in a specific version see schematic diagram and respective parts list. 3139 113 3474 pt3 dd wk0232



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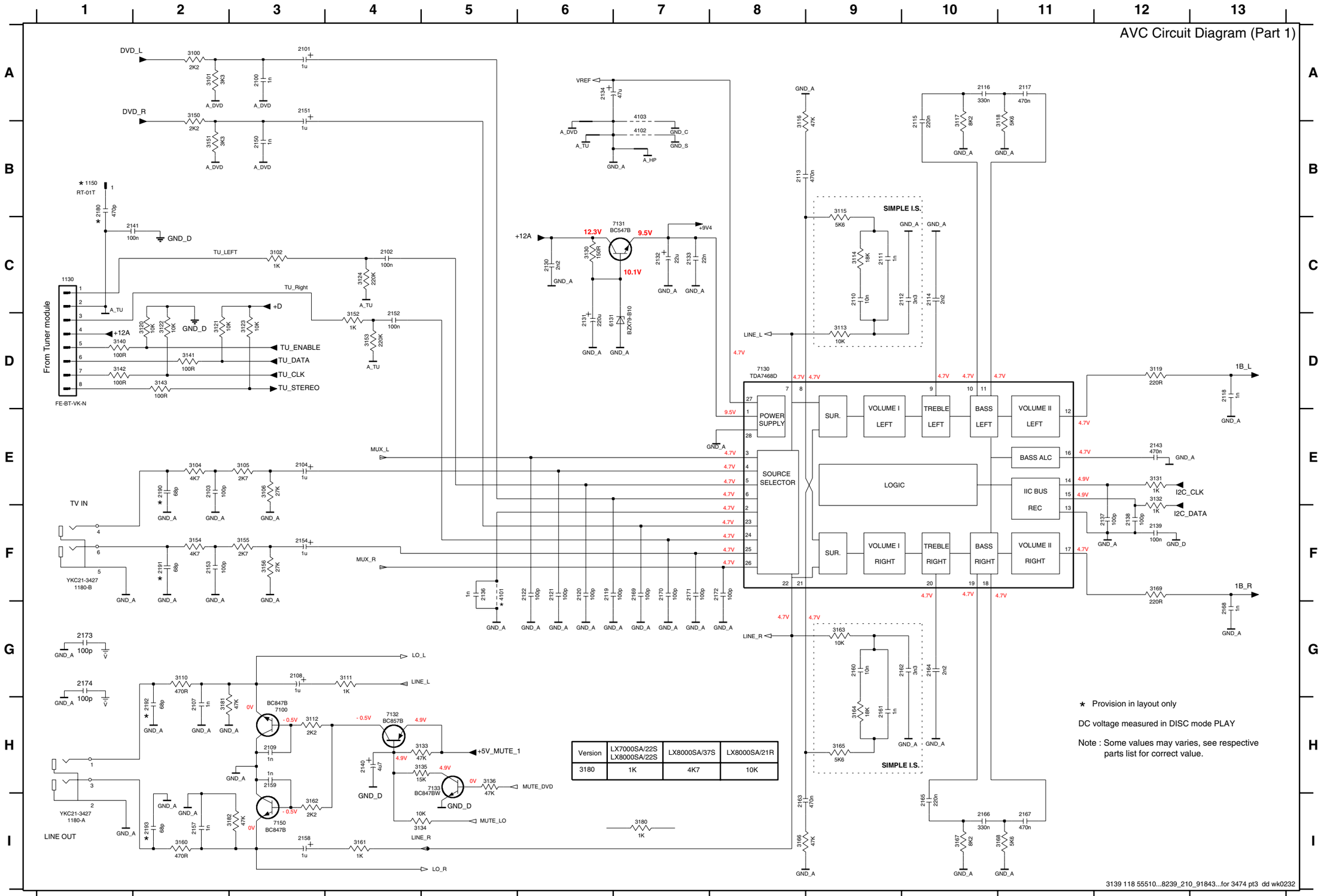
AVC BOARD - CIRCUIT DIAGRAM (PART 1)



Version	LX7000SA/22S LX8000SA/22S	LX8000SA/37S	LX8000SA/21R
3180	1K	4K7	10K

∗ Provision in layout only

DC voltage measured in DISC mode PLAY

Note : Some values may varies, see respective parts list for correct value.

3139 118 55510...8239_210_91843...for 3474 pt3 dd wk0232

1130 C1
1150 B1
1180-A I1
1180-B F1
2100 A3
2101 A3
2102 C4
2103 E2
2104 E3
2107 H2
2108 G3
2109 H3
2110 C9
2111 C9
2112 C10
2113 B8
2114 C10
2115 B10
2116 A10
2117 A11
2118 D13
2119 F6
2120 F6
2121 F6
2122 F6
2130 C6
2131 D6
2132 C7
2133 C7
2134 A6
2136 F5
2137 F12
2138 F12
2139 F12
2140 H4
2141 C1
2143 E12
2150 B3
2151 A3
2152 D4
2153 F2
2154 F3
2157 I2
2158 I3
2159 H3
2160 G9
2161 H9
2162 G10
2163 I8
2164 G10
2165 I10
2166 I10
2167 I11
2168 G13
2169 F7
2170 F7
2171 F7
2172 F8
2173 G1
2174 G1
2180 B1
2190 E2
2191 F2
2192 H2
2193 I2
3100 A2
3101 A2
3102 C3
3104 E2
3105 E3
3106 E3
3110 G2
3111 G4
3112 H3
3113 D9
3114 C9
3115 B9
3116 B8
3117 B10
3118 B11
3119 D12
3120 D2
3121 D2
3122 D2
3123 D3
3124 C4
3130 C6
3131 E12
3132 E12
3133 H5
3134 I4
3135 H4
3136 H5
3140 D1
3141 D2
3142 D1
3143 D2
3150 A2
3151 B2
3152 D4
3153 D4
3154 F2
3155 F3
3156 F3
3160 I2
3161 I4
3162 I3
3163 G9
3164 H9
3165 H9
3166 I8
3167 I10
3168 I11
3169 F12
3180 I7
3181 H2
3182 I3
4101 F5
4102 B7
4103 A7
6131 D6
7100 H3
7130 D8
7131 C7
7132 H4
7133 H5
7150 I3

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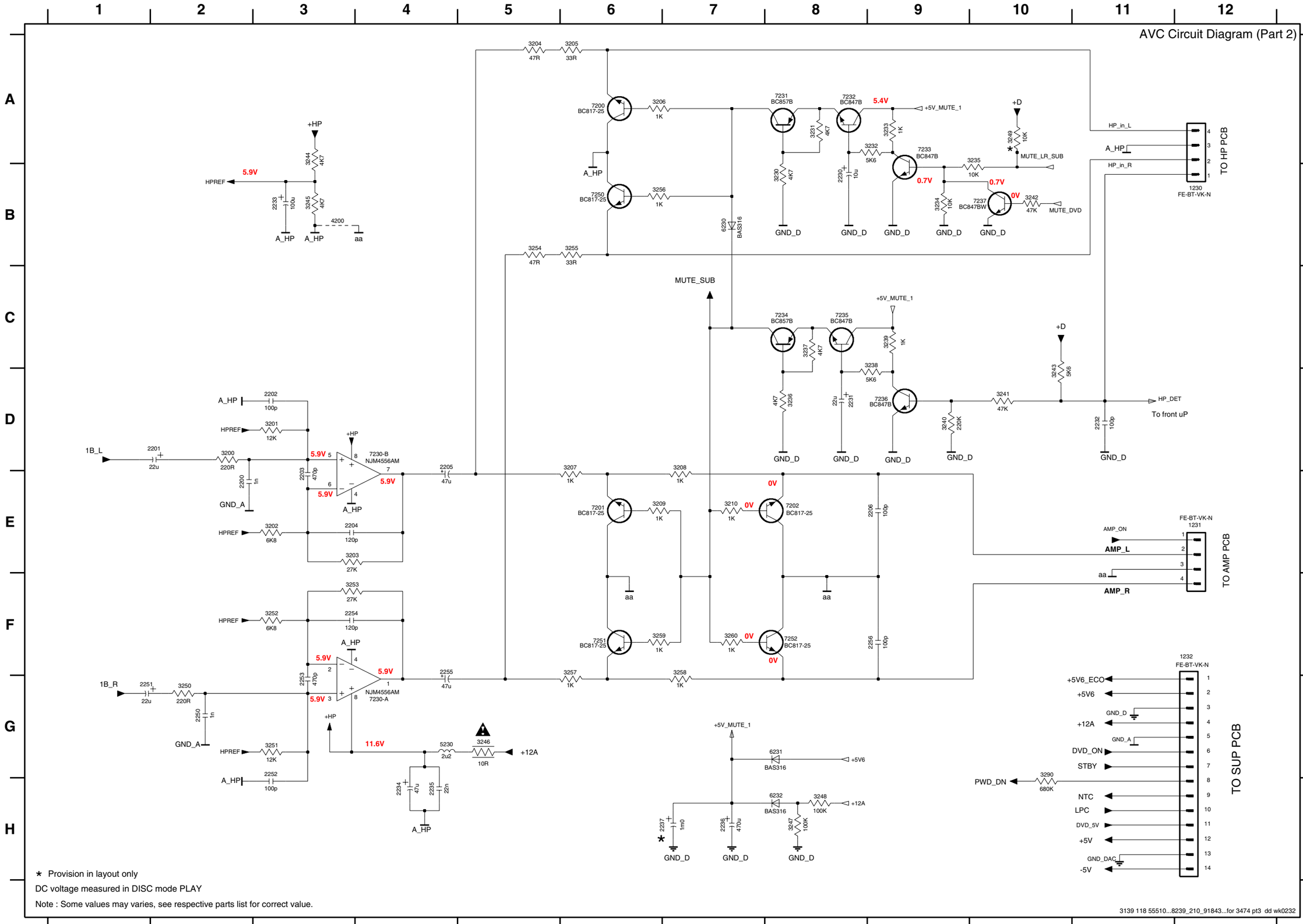
AVC BOARD - CIRCUIT DIAGRAM (PART 2)



1230 B12
1231 E12
1232 F12
2200 E2
2201 D2
2202 D3
2203 E3
2204 E3
2205 D4
2206 E9
2230 B8
2231 D8
2232 D11
2233 B3
2234 H4
2235 H4
2236 H7
2237 H7
2250 G2
2251 G1
2252 G3
2253 G3
2254 F3
2255 F4
2256 F9
3200 D2
3201 D3
3202 E3
3203 E3
3204 A5
3205 A6
3206 A6
3207 D6
3208 D7
3209 E6
3210 E7
3230 B8
3231 A8
3232 A9
3233 A9
3234 B9
3235 A10
3236 D8
3237 C8
3238 C9
3239 C9
3240 D9
3241 D10
3242 B10
3243 D10
3244 A3
3245 B3
3246 G5
3247 H8
3248 H8
3249 A10
3250 G2
3251 G3
3252 F3
3253 F3
3254 B5
3255 B6
3256 B6
3257 F6
3258 F7
3259 F6
3260 F7
3290 G10
4200 B3
5230 G4
6230 B7
6231 G8
6232 H8
7200 A6
7201 E6
7202 E8
7230-A G4
7230-B D4
7231 A8
7232 A8
7233 A9
7234 C8
7235 C8
7236 D9
7237 B10
7250 B6
7251 F6
7252 F8

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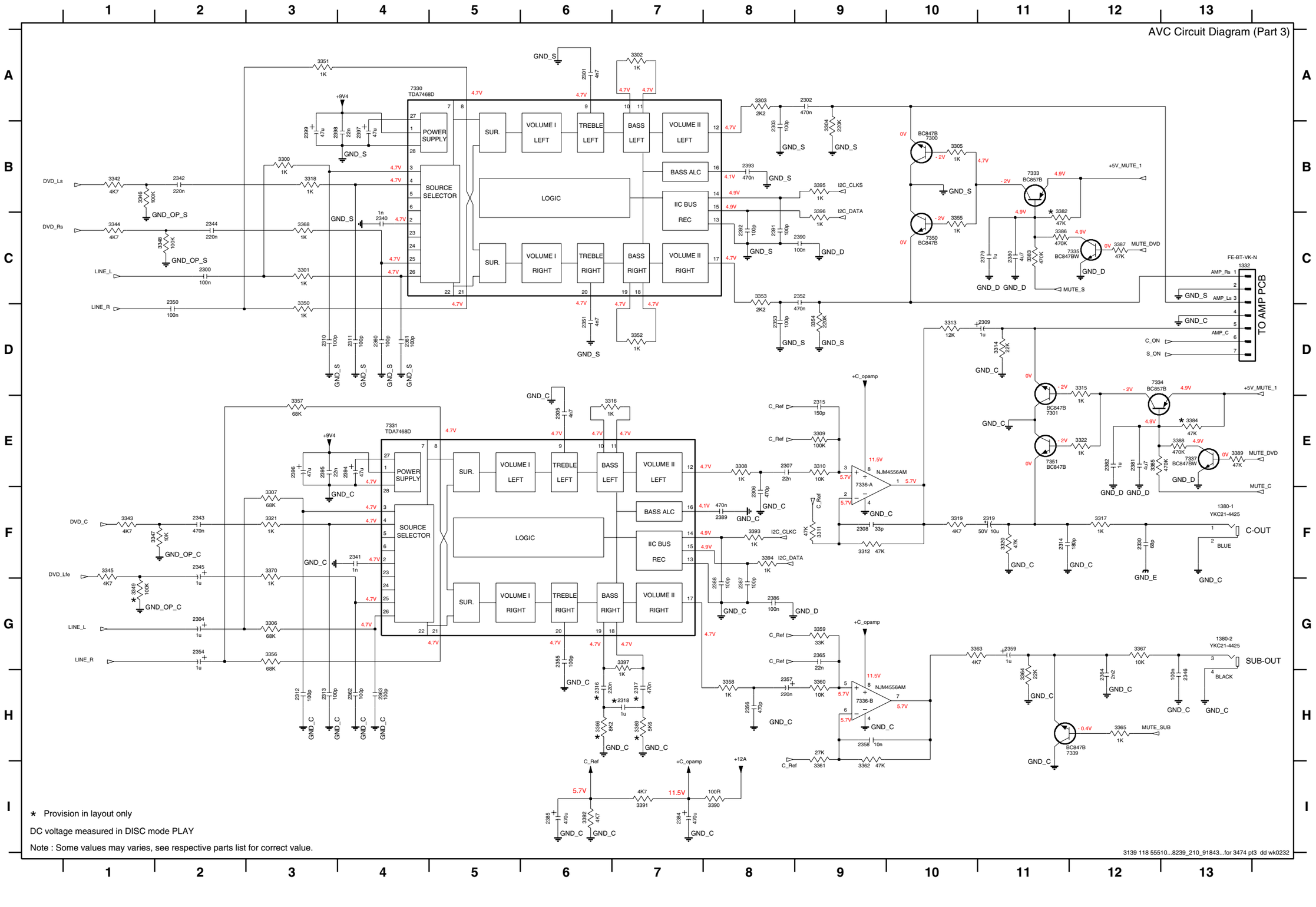
AVC BOARD - CIRCUIT DIAGRAM (PART 3)

1332 C13	2303 B8	2309 D11	2315 E9	2340 C4	2346 H13	2355 G6	2361 D4	2380 C11	2387 G8	2393 B8	2399 B3	3305 B10	3311 F9	3317 F12	3342 B1	3348 C2	3354 D9	3360 H9	3366 H6	3383 C11	3389 E13	3395 B9	7331 E4	7337 E13
1380-1 F13	2304 G2	2310 D4	2316 H6	2341 F4	2350 D2	2356 H8	2362 H4	2381 E12	2388 G8	2394 E4	3300 B3	3306 G3	3312 F9	3318 B3	3343 F1	3349 G1	3355 C10	3361 I9	3367 G12	3384 E13	3390 I8	3396 C9	7333 B11	7339 H12
1380-2 G13	2305 E6	2311 D4	2317 H7	2342 B2	2351 D6	2357 H8	2363 H4	2382 E12	2389 F8	2395 E3	3301 C3	3307 F3	3313 D10	3319 F10	3344 C1	3350 D3	3356 G3	3362 I9	3368 C3	3385 E12	3391 I7	3397 G7	7334 B12	7350 C10
2300 C2	2306 F8	2312 H3	2318 H7	2343 F2	2352 C9	2358 H9	2364 H12	2384 I7	2390 C9	2396 E3	3302 A7	3308 E8	3314 D11	3320 F11	3345 F1	3351 A3	3357 E3	3363 G10	3369 H7	3386 E13	3392 I6	7300 B10	7335 C12	7351 E11
2301 A6	2307 E8	2313 H4	2319 F11	2344 C2	2353 D8	2359 G11	2365 G9	2385 I6	2391 C8	2397 B4	3303 A8	3309 E9	3315 D12	3321 F3	3346 B1	3352 D7	3358 H8	3364 H11	3370 F3	3387 C12	3393 F8	7301 D11	7336-A E9	
2302 A9	2308 F9	2314 F11	2330 F12	2345 F2	2354 G2	2360 D4	2379 C11	2386 G8	2392 C8	2398 B3	3304 B9	3310 E9	3316 E6	3322 E12	3347 F2	3353 C8	3359 G9	3365 H12	3382 C11	3388 E13	3394 F8	7330 A4	7336-B H9	



10-8

AVC BOARD - CIRCUIT DIAGRAM (PART 4)

AVC Circuit Diagram (Part 4)

Note : Some values may varies, see respective parts list for correct value.

DC voltages measured in DISC mode STOP

* Provision in layout only

@ For LX8000SA/21R/37S only

For LX8000SA/21R/37S only

For /22S version only

From Supply PCB

From DVD module

From P-scan PCB

0 - 0.4V : CVBS
1 - 3.0V : EXT RGB

Output on 0_6_12 0 - 2V : TV BCAST
4.5 - 7V : 16 : 9 DVD
9.5-12V : 4: 3 DVD

S-VIDEO

CVBS

1400 I2
1401 B13
1402 C12
1403 D12
1421 A6
1422 B1
1423 E1
1424 B1
1430-A I13
1430-B F13
1430-C E14
1431 A13
1434 H7
2400 F3
2401 F4
2402 F7
2403 F6
2410 G3
2411 G4
2412 H7
2413 G6
2420 I3
2421 I4
2422 I7
2423 H6
2424 A14
2425 B14
2426 B13
2433 G13
2434 G13
2435 F11
2436 H11
2437 G12
2440 B3
2441 B4
2443 B4
2444 C4
2445 C2
2446 D4
2447 G13
2448 B13
2449 C13
2450 B14
2451 B14
2452 C14
2453 C14
2454 C14
2455 D14
2456 I12
2461 G9
2466 D12
2470 B10
2480 F9
2481 F9
2482 F14
2483 A12
2484 A12
2486 I9
2487 D13
2490 B12
2491 A13
2492 A13
3400 F3
3401 F3
3402 F5
3403 F5
3404 G5
3405 G6
3406 F6
3410 G3
3411 G3
3412 G5
3413 G5
3414 H5
3415 H6
3416 G6
3420 I3
3421 I3
3422 I5
3423 I5
3424 I5
3425 I6
3426 I6
3430 H2
3431 I2
3440 E10
3442 F11
3443 F11
3450 H10
3451 H11
3452 H11
3470 B9
3471 B10
3472 G9
3480 F9
3481 A13
3482 A13
3490 B11
3491 B12
3492 A10
3493 A10
3494 A10
3495 A11
3496 B11
3497 B11
3498 B11
3499 A12
4482 E9
4483 I11
4484 C6
4485 I8
4486 H8
4488 E14
5400 F4
5401 F4
5410 G4
5411 G4
5420 H4
5421 H4
5430 A6
5431 A7
5445 C2
5482 E9
7400 F6
7410 G6
7420 H6
7421 E11
7422 H11
7423 A11
7424 B11
7440 B3
7442 C3

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AVC BOARD - CIRCUIT DIAGRAM (PART 5)

AVC Circuit Diagram (Part 5)

For /22S version only

LPS OPTION	Version
4500	LPS
4530	No LPS

% 3568	Version
0 ohm	Ghost key
3K9	LX7000SA/22S
12K	LX8000SA/21R
# 27K	LX8000SA/22S
None	LX8000SA/37S

Use 3K9 for LX8000SA/22

@ For LX8000SA/21R/37S only

⋆ Provision in layout only

DC voltage measured in DISC mode PLAY

Note : Some values may varies, see respective parts list for correct value.

3139 118 55510...8239_210_91843...for 3474 pt3 dd wk0232

1530 A8
1531 A14
2530 H3
2531 H3
2532 I3
2533 I2
2550 D4
2551 C3
2552 C1
2553 D1
2554 C1
2560 G6
2562 I7
2563 H7
2564 H7
2565 H12
2566 E12
2567 D6
2568 H8
2569 F11
2570 B11
2571 C12
2572 D4
2573 F8
2574 G9
2575 G9
2576 H9
2577 H8
2578 B11
2580 F2
2581 F3
3500 B10
3501 F9
3502 B10
3503 B9
3504 D7
3505 D7
3506 D7
3507 B9
3508 C7
3509 B9
3510 B8
3511 D7
3512 D6
3513 E7
3514 E7
3515 E8
3516 E8
3517 E8
3518 F8
3519 E8
3520 F8
3521 E9
3522 E10
3523 E10
3524 E10
3525 E10
3526 E10
3527 E10
3528 E10
3529 E11
3530 E11
3531 E11
3532 E11
3533 E11
3534 D11
3535 D11
3536 D11
3537 D11
3538 D11
3539 D12
3540 D11
3541 C12
3542 C11
3543 C12
3544 B11
3545 B11
3546 B11
3547 B10
3548 H8
3549 G12
3550 D4
3551 D4
3552 C5
3553 D5
3554 E3
3555 E3
3556 C1
3559 A5
3560 H6
3561 H7
3562 I7
3563 H11
3564 H11
3565 H11
3566 H11
3567 G5
3568 H5
3569 A1
3570 E14
3571 D14
3572 A4
3573 A3
3574 B2
3575 A2
3576 B11
3577 B10
3579 B3
3580 B9
3581 B9
3582 B5
3583 A5
3584 A6
3585 A7
3586 B9
3587 A3
3588 A6
3589 B2
3590 B5
3596 B10
3598 D14
3599 B8
4500 C6
4501 H7
4530 C6
5530 F9
5531 F9
5532 F3
5533 B12
5581 H10
5582 C3
6531 B12
6532 B12
6533 F9
6534 G7
6535 G2
6536 B12
7531 C2
7532 H10
7533 H9
7534 H7
7535 A3
7536 B7
7537 A6
7538 B5
7539 B2

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AVC BOARD - CIRCUIT DIAGRAM (PART 6)

Note : Some values may varies, see respective parts list for correct value.

DC voltages measured in DISC mode PLAY

★ Provision in layout only

AVC Circuit Diagram (Part 6)

From DVD module

CLK_SEL	MCLK
HI	384FS (DSD_CLK)
LO	256FS (PCM_CLK)

(16.9344MHz)

(FS=32, 44.1, 48 and 96KHz)

3139 118 55510...8239_210_91843...for 3474 pt3 dd wk0232

1601 B6
1602 C6
1630 F1
2600 B10
2601 B11
2602 B12
2603 C10
2604 B12
2605 A12
2610 C10
2611 C11
2612 C12
2613 D10
2614 B11
2615 C11
2616 D11
2617 F11
2618 G11
2619 H11
2620 D9
2621 D10
2622 D11
2623 E10
2624 E10
2625 E12
2626 E12
2627 D12
2630 F9
2631 F10
2632 F11
2633 F10
2634 F10
2635 F12
2640 G10
2641 G10
2642 G11
2643 H10
2644 H10
2645 G12
2646 G12
2647 G12
2650 H10
2651 H10
2652 H11
2653 I10
2654 I10
2655 I12
2656 H6
2660 D2
2661 D2
2662 E2
2663 F2
2664 C5
2665 C6
2666 E4
2667 E4
2669 B6
2670 B7
2671 B7
2672 C5
2674 G4
2675 G6
2676 G7
2677 G7
2678 H5
2679 H4
2680 G6
2681 I2
2682 I2
2683 I7
2684 I3
2685 B7
2686 C7
2687 A7
2688 A10
2689 B2
2690 B4
2691 B11
2692 C11
2693 D11
2694 F11
2695 G11
2696 H11
2697 F9
2698 E9
2699 C8
3600 A9
3601 B10
3602 B10
3603 B11
3604 B9
3605 B11
3606 B12
3607 B11
3608 A10
3609 A7
3610 C9
3611 C10
3612 C10
3613 C11
3614 C9
3615 D11
3616 D12
3617 C11
3618 H7
3619 F7
3620 D9
3621 D10
3622 D10
3623 D10
3624 D11
3625 E9
3626 E10
3627 E11
3628 E12
3629 E11
3630 E9
3631 E10
3632 F10
3633 F10
3634 F11
3635 F9
3636 F10
3637 F11
3638 F12
3639 F11
3640 G9
3641 G10
3643 G10
3644 G11
3645 G9
3646 G10
3647 H11
3649 G11
3650 H12
3651 B7
3652 H12
3654 C3
3655 B7
3656 B8
3657 I1
3658 I2
3659 I1
3660 C1
3661 D2
3662 D2
3663 D2
3664 E2
3665 E2
3666 E2
3667 E2
3668 F2
3669 D4
3670 D4
3671 C4
3672 F7
3673 G3
3674 G3
3675 B8
3676 B1
3677 B2
3678 B8
3679 G3
3680 A8
3681 A8
3682 A8
3683 A11
3684 A11
3685 A11
3686 I6
3687 I2
3688 H2
3689 H8
3690 H5
3691 G1
3692 A4
3693 B3
3696 C3
3697 B3
3698 C2
3699 C2
4601 A4
4602 G5
4603 C8
4604 B5
5600 B7
5601 B7
5602 B5
5630 I2
5640 C1
5641 C1
6630 E6
6631 F6
6632 F7
7610 C3
7612 A4
7613 B4
7630-A G3
7630-B H2
7630-C G2
7630-D I1
7630-E I3
7630-F H4
7631-A H5
7631-B I6
7631-C I7
7631-D I5
7632 C6
7634-A A12
7634-B C12
7635-A D12
7635-B E12
7636-A G12
7636-B H12
7660 H7
7661 H8
7662 F8

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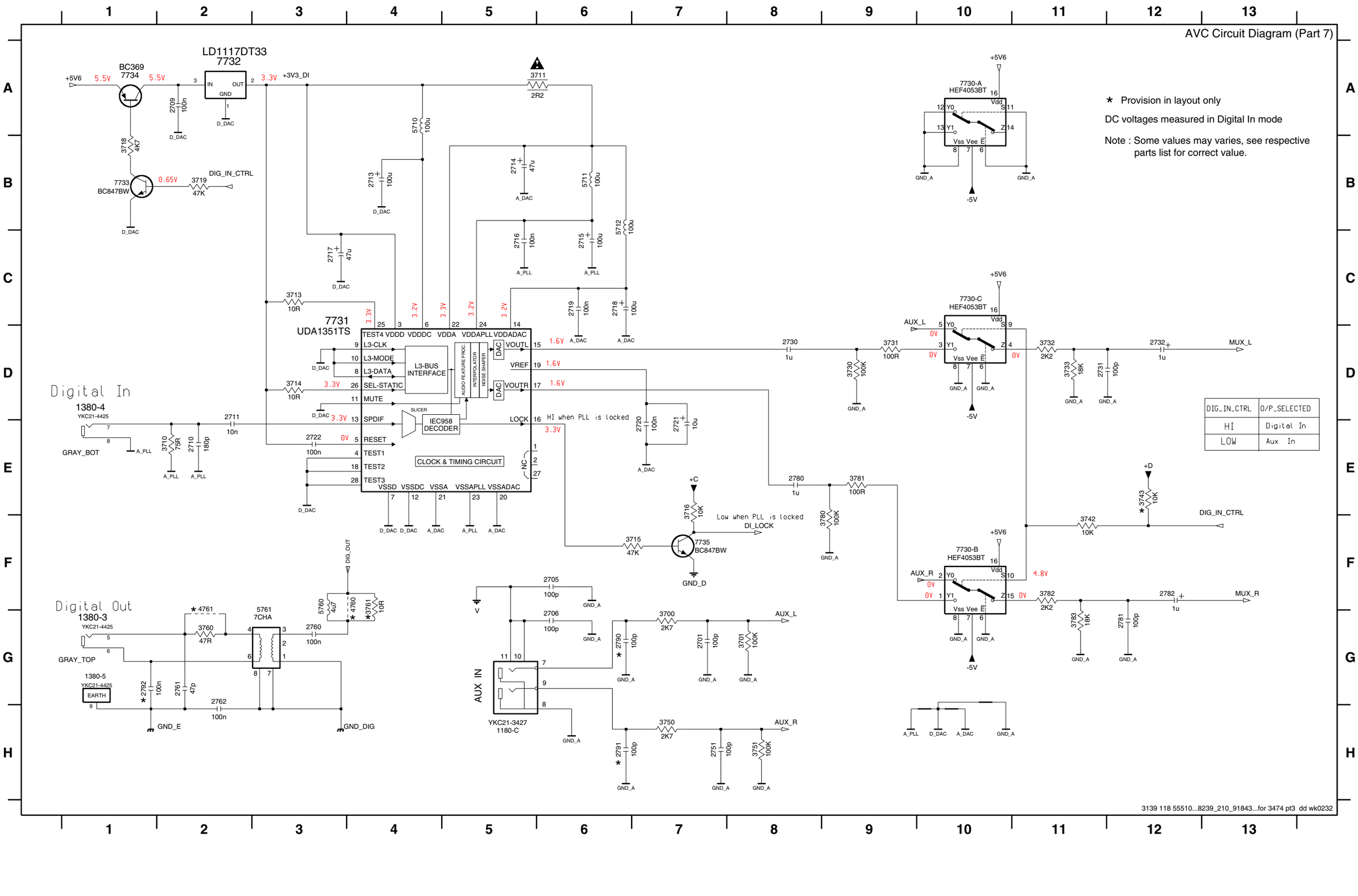
AVC BOARD - CIRCUIT DIAGRAM (PART 7)

1180-C H5	1380-5 G1	2706 G6	2711 D2	2715 C6	2718 C6	2721 E7	2731 D11	2760 G3	2780 E8	2790 G6	3700 G7	3711 A6	3715 F7	3719 B2	3732 D11	3743 E12	3760 G2	3781 E9	4760 F4	5711 B6	5761 G3	7730-C C10	7733 B1
1380-3 G1	2701 G7	2709 A2	2713 B4	2716 C5	2719 C6	2722 E3	2732 D12	2761 G2	2781 G12	2791 H6	3701 G8	3713 C3	3716 E7	3730 D9	3733 D11	3750 H7	3761 F4	3782 F11	4761 G2	5712 B6	7730-A A10	7731 C4	7734 A1
1380-4 D1	2705 F6	2710 E2	2714 B5	2717 C3	2720 E7	2730 D8	2751 H7	2762 G2	2782 F12	2792 G1	3710 E2	3714 D3	3718 B1	3731 D9	3742 F11	3751 H8	3780 F9	3783 G11	5710 A4	5760 F3	7730-B F10	7732 A2	7735 F7



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ELECTRICAL PARTS LIST - AVC BOARD

ELECTRICAL PARTS LIST - AVC BOARD

MISCELLANEOUS

1130	4822 265 11515	Flex Connector 8P
1180	4822 267 31449	Cinch Socket 6P - Aux in & TV in & Line out
1230	4822 267 10733	Flex Connector 4P
1231	4822 267 10733	Flex Connector 4P
1232	4822 267 51255	Flex Connector 14P
1332	4822 267 10953	Flex Connector 7P
1380	2422 026 05341	Cinch Socket 4P - Digital in & Digital out & Center out & Woofer Line out
1400	2422 127 00549	Switch (P-Scan Select) 1P 2POS 12V 8MM5
1421	2422 025 17433	Flex Connector 30P
1422	2422 025 14526	Flex Connector 16P
1423	4822 267 10732	Flex Connector 12P
1424	4822 267 51255	Flex Connector 14P
1430	2422 033 00442	Socket Video out 2P - CVBS & S-Video
1431	2422 025 12352	Socket Video out 21P-Scart out
1434	2422 026 05342	Cinch Socket 3P - GN/BU/RD (YUV out)
1530	4822 265 10981	Flex Connector 15P
1531	4822 267 10738	Flex Connector 13P
1630	2422 025 17433	Flex Connector 30P

CAPACITORS

2100	3198 016 31020	1nF 25V
2101	4822 124 21913	1uF 20% 63V
2102	2238 586 59812	100nF +80/-20% 50V
2103	2020 552 94427	100pF 5% 50V
2104	4822 124 21913	1uF 20% 63V
2107	3198 016 31020	1nF 25V
2108	4822 124 21913	1uF 20% 63V
2109	3198 016 31020	1nF 25V
2110	5322 126 11583	10nF 10% 50V
2111	3198 016 31020	1nF 25V
2112	5322 126 11579	3,3nF 10% 63V
2113	4822 126 14583	470nF 10% 16V
2114	4822 126 14238	2,2nF 50V
2115	4822 126 13879	220nF +80/-20% 16V
2116	2020 552 96327	330nF 10% 16V
2117	2020 552 96684	470nF 10% 25V
2118	3198 016 31020	1nF 25V
2119	2020 552 94427	100pF 5% 50V
2120	2020 552 94427	100pF 5% 50V
2121	2020 552 94427	100pF 5% 50V
2122	2020 552 94427	100pF 5% 50V
2130	4822 126 14238	2,2nF 50V
2131	4822 124 40196	220uF 20% 16V
2132	4822 124 81151	22uF 50V
2133	4822 126 14494	22nF 10% 25V
2134	4822 124 40433	47uF 20% 25V
2136	3198 016 31020	1nF 25V
2137	2020 552 94427	100pF 5% 50V
2138	2020 552 94427	100pF 5% 50V
2139	2238 586 59812	100nF +80/-20% 50V
2140	4822 124 40769	4,7uF 20% 100V
2141	2238 586 59812	100nF +80/-20% 50V
2143	4822 126 14583	470nF 10% 16V
2150	3198 016 31020	1nF 25V
2151	4822 124 21913	1uF 20% 63V
2152	2238 586 59812	100nF +80/-20% 50V
2153	2020 552 94427	100pF 5% 50V
2154	4822 124 21913	1uF 20% 63V
2157	3198 016 31020	1nF 25V
2158	4822 124 21913	1uF 20% 63V
2159	3198 016 31020	1nF 25V
2160	5322 126 11583	10nF 10% 50V
2161	3198 016 31020	1nF 25V
2162	5322 126 11579	3,3nF 10% 63V
2163	4822 126 14583	470nF 10% 16V
2164	4822 126 14238	2,2nF 50V
2165	4822 126 13879	220nF +80/-20% 16V
2166	2020 552 96327	330nF 10% 16V
2167	2020 552 96684	470nF 10% 25V
2168	3198 016 31020	1nF 25V
2169	2020 552 94427	100pF 5% 50V
2170	2020 552 94427	100pF 5% 50V
2171	2020 552 94427	100pF 5% 50V
2172	2020 552 94427	100pF 5% 50V
2173	2020 552 94427	100pF 5% 50V
2174	2020 552 94427	100pF 5% 50V
2200	3198 016 31020	1nF 25V
2201	4822 124 81151	22uF 50V
2202	2020 552 94427	100pF 5% 50V
2203	4822 126 13881	470pF 5% 50V
2204	5322 122 33861	120pF 10% 50V
2205	4822 124 40433	47uF 20% 25V
2206	2020 552 94427	100pF 5% 50V
2230	4822 124 40248	10uF 20% 63V
2231	4822 124 81151	22uF 50V
2232	2020 552 94427	100pF 5% 50V
2233	4822 124 41584	100uF 20% 10V
2234	4822 124 40433	47uF 20% 25V
2235	4822 126 14494	22nF 10% 25V
2236	4822 124 81044	470uF 20% 6,3V
2250	3198 016 31020	1nF 25V
2251	4822 124 81151	22uF 50V
2252	2020 552 94427	100pF 5% 50V
2253	4822 126 13881	470pF 5% 50V
2254	5322 122 33861	120pF 10% 50V
2255	4822 124 40433	47uF 20% 25V
2256	2020 552 94427	100pF 5% 50V
2300	2238 586 59812	100nF +80/-20% 50V
2301	4822 126 13193	4,7nF 10% 63V
2302	4822 126 14583	470nF 10% 16V
2303	2020 552 94427	100pF 5% 50V
2304	4822 124 21913	1uF 20% 63V
2305	4822 126 13193	4,7nF 10% 63V
2306	4822 126 13881	470pF 5% 50V
2307	4822 126 14494	22nF 10% 25V
2308	2222 867 15339	33pF 5% 50V
2309	4822 124 21913	1uF 20% 63V
2310	2020 552 94427	100pF 5% 50V
2311	2020 552 94427	100pF 5% 50V
2312	2020 552 94427	100pF 5% 50V
2313	2020 552 94427	100pF 5% 50V
2314	4822 126 14508	180pF 5% 50V
2315	4822 122 33753	150pF 5% 50V
2319	4822 124 40248	10uF 20% 63V
2330	4822 126 13956	68pF 5% 63V
2340	3198 016 31020	1nF 25V
2341	3198 016 31020	1nF 25V
2342	4822 126 13879	220nF +80/-20% 16V
2343	4822 126 14583	470nF 10% 16V
2344	4822 126 13879	220nF +80/-20% 16V
2345	4822 124 21913	1uF 20% 63V
2346	2238 586 59812	100nF +80/-20% 50V
2350	2238 586 59812	100nF +80/-20% 50V
2351	4822 126 13193	4,7nF 10% 63V
2352	4822 126 14583	470nF 10% 16V
2353	2020 552 94427	100pF 5% 50V
2354	4822 124 21913	1uF 20% 63V
2355	2020 552 94427	100pF 5% 50V
2356	4822 126 13881	470pF 5% 50V
2357	4822 124 40746	0,22uF 20% 63V
2358	5322 126 11583	10nF 10% 50V
2359	4822 124 21913	1uF 20% 63V
2360	2020 552 94427	100pF 5% 50V
2361	2020 552 94427	100pF 5% 50V
2362	2020 552 94427	100pF 5% 50V
2363	2020 552 94427	100pF 5% 50V
2364	4822 126 14238	2,2nF 50V
2365	4822 126 14494	22nF 10% 25V
2379	4822 126 14472	1uF 10% 10V
2380	2020 552 96305	4,7uF +80/-20% 10V
2381	2020 552 96305	4,7uF +80/-20% 10V
2382	4822 126 14472	1uF 10% 10V
2384	4822 124 81044	470uF 20% 6,3V
2385	4822 124 81044	470uF 20% 6,3V
2386	2238 586 59812	100nF +80/-20% 50V
2387	2020 552 94427	100pF 5% 50V
2388	2020 552 94427	100pF 5% 50V
2389	4822 126 14583	470nF 10% 16V
2390	2238 586 59812	100nF +80/-20% 50V
2391	2020 552 94427	100pF 5% 50V
2392	2020 552 94427	100pF 5% 50V
2393	4822 126 14583	470nF 10% 16V
2394	4822 124 40433	47uF 20% 25V
2395	4822 126 14494	22nF 10% 25V
2396	4822 124 40433	47uF 20% 25V
2397	4822 124 40433	47uF 20% 25V
2398	4822 126 14494	22nF 10% 25V
2399	4822 124 40433	47uF 20% 25V
2400	4822 122 33761	22pF 5% 50V
2401	4822 126 11785	47pF 5% 50V
2402	2020 552 94427	100pF 5% 50V
2403	2238 586 59812	100nF +80/-20% 50V
2410	4822 122 33761	22pF 5% 50V
2411	4822 126 11785	47pF 5% 50V
2412	2020 552 94427	100pF 5% 50V
2413	2238 586 59812	100nF +80/-20% 50V
2420	4822 122 33761	22pF 5% 50V
2421	4822 126 11785	47pF 5% 50V
2422	2020 552 94427	100pF 5% 50V
2423	2238 586 59812	100nF +80/-20% 50V
2435	4822 122 33761	22pF 5% 50V
2436	4822 122 33761	22pF 5% 50V
2437	4822 126 13883	220pF 5% 50V
2440	4822 124 41584	100uF 20% 10V
2441	2238 586 59812	100nF +80/-20% 50V
2443	4822 124 40433	47uF 20% 25V
2444	2238 586 59812	100nF +80/-20% 50V
2445	2238 586 59812	100nF +80/-20% 50V
2446	4822 124 40184	1000uF 20% 10V
2447	4822 126 13883	220pF 5% 50V
2448	2238 586 59812	100nF +80/-20% 50V
2449	2238 586 59812	100nF +80/-20% 50V
2450	4822 126 13956	68pF 5% 63V
2451	4822 126 13956	68pF 5% 63V
2452	4822 126 13956	68pF 5% 63V
2453	4822 126 13956	68pF 5% 63V
2454	4822 126 13956	68pF 5% 63V
2456	4822 126 13883	220pF 5% 50V
2461	4822 124 40196	220uF 20% 16V
2466	4822 126 13883	220pF 5% 50V
2470	3198 017 42230	22nF 50V
2480	4822 124 40196	220uF 20% 16V
2481	2238 586 59812	100nF +80/-20% 50V
2482	4822 126 14494	22nF 10% 25V
2483	4822 126 13883	220pF 5% 50V
2484	4822 126 13883	220pF 5% 50V
2486	3198 017 34730	47nF 16V
2487	2238 586 59812	100nF +80/-20% 50V
2490	3198 017 42230	22nF 50V
2530	2238 586 59812	100nF +80/-20% 50V
2531	4822 124 40433	47uF 20% 25V
2532	2238 586 59812	100nF +80/-20% 50V

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ELECTRICAL PARTS LIST - AVC BOARD

ELECTRICAL PARTS LIST - AVC BOARD

CAPACITORS

2533	2238 586 59812	100nF +80/-20% 50V
2550	4822 124 22652	2,2uF 20% 50V
2551	2238 586 59812	100nF +80/-20% 50V
2552	4822 126 14249	560pF 10% 50V
2553	4822 126 14249	560pF 10% 50V
2554	4822 126 11785	47pF 5% 50V
2560	5322 126 11583	10nF 10% 50V
2562	3198 017 34730	47nF 16V
2563	4822 126 14583	470nF 10% 16V
2565	3198 017 41050	1uF 10V
2566	2020 552 94427	100pF 5% 50V
2567	2020 552 94427	100pF 5% 50V
2568	4822 126 14223	2,2pF 50V
2569	4822 122 33761	22pF 5% 50V
2570	4822 124 40433	47uF 20% 25V
2571	4822 124 40433	47uF 20% 25V
2572	3198 016 31020	1nF 25V
2574	4822 122 33761	22pF 5% 50V
2575	4822 122 33761	22pF 5% 50V
2576	4822 122 33761	22pF 5% 50V
2577	3198 017 41050	1uF 10V
2578	2238 586 59812	100nF +80/-20% 50V
2580	4822 126 14226	82pF 5% 50V
2581	4822 126 11785	47pF 5% 50V
2600	4822 126 14249	560pF 10% 50V
2601	2020 552 94427	100pF 5% 50V
2602	2020 552 94427	100pF 5% 50V
2603	4822 126 14249	560pF 10% 50V
2604	2238 586 59812	100nF +80/-20% 50V
2605	2238 586 59812	100nF +80/-20% 50V
2610	4822 126 14249	560pF 10% 50V
2611	2020 552 94427	100pF 5% 50V
2612	2020 552 94427	100pF 5% 50V
2613	4822 126 14249	560pF 10% 50V
2614	3198 016 36810	680pF 25V
2615	3198 016 36810	680pF 25V
2616	3198 016 36810	680pF 25V
2617	3198 016 36810	680pF 25V
2618	3198 016 36810	680pF 25V
2619	3198 016 36810	680pF 25V
2620	4822 126 14241	330pF 50V
2621	4822 126 13881	470pF 5% 50V
2622	4822 126 14226	82pF 5% 50V
2623	4822 126 14241	330pF 50V
2624	4822 126 13881	470pF 5% 50V
2625	4822 126 14226	82pF 5% 50V
2626	2238 586 59812	100nF +80/-20% 50V
2627	2238 586 59812	100nF +80/-20% 50V
2630	4822 126 14241	330pF 50V
2631	4822 126 13881	470pF 5% 50V
2632	4822 126 14226	82pF 5% 50V
2633	4822 126 14241	330pF 50V
2634	4822 126 13881	470pF 5% 50V
2635	4822 126 14226	82pF 5% 50V
2640	4822 126 14241	330pF 50V
2641	4822 126 13881	470pF 5% 50V
2642	4822 126 14226	82pF 5% 50V
2643	4822 126 14241	330pF 50V
2644	4822 126 13881	470pF 5% 50V
2645	4822 126 14226	82pF 5% 50V
2646	2238 586 59812	100nF +80/-20% 50V
2647	2238 586 59812	100nF +80/-20% 50V
2650	4822 126 14241	330pF 50V
2651	4822 126 13881	470pF 5% 50V
2652	4822 126 14226	82pF 5% 50V
2653	4822 126 14241	330pF 50V
2654	4822 126 13881	470pF 5% 50V
2655	4822 126 14226	82pF 5% 50V
2660	4822 122 33752	15pF 5% 50V
2661	4822 122 33752	15pF 5% 50V
2662	4822 122 33752	15pF 5% 50V
2663	4822 126 11785	47pF 5% 50V
2664	4822 124 21913	1uF 20% 63V
2665	2238 586 59812	100nF +80/-20% 50V
2666	2238 586 59812	100nF +80/-20% 50V
2667	4822 124 21913	1uF 20% 63V
2669	4822 124 40433	47uF 20% 25V
2670	4822 124 40433	47uF 20% 25V
2671	4822 124 40433	47uF 20% 25V
2672	2238 586 59812	100nF +80/-20% 50V
2674	2238 586 59812	100nF +80/-20% 50V
2675	4822 124 21913	1uF 20% 63V
2676	2238 586 59812	100nF +80/-20% 50V
2677	4822 124 40433	47uF 20% 25V
2678	2238 586 59812	100nF +80/-20% 50V
2679	2238 586 59812	100nF +80/-20% 50V
2680	2238 586 59812	100nF +80/-20% 50V
2681	4822 122 33741	10pF 10% 50V
2682	4822 122 33741	10pF 10% 50V
2683	2238 586 59812	100nF +80/-20% 50V
2685	3198 016 31020	1nF 25V
2687	4822 124 40433	47uF 20% 25V
2688	4822 124 40433	47uF 20% 25V
2689	4822 126 14472	1uF 10% 10V
2698	3198 017 34730	47nF 16V
2701	2020 552 94427	100pF 5% 50V
2705	2020 552 94427	100pF 5% 50V
2706	2020 552 94427	100pF 5% 50V
2709	2238 586 59812	100nF +80/-20% 50V
2710	4822 126 14508	180pF 5% 50V
2711	5322 126 11583	10nF 10% 50V
2713	4822 124 41584	100uF 20% 10V
2714	4822 124 40433	47uF 20% 25V
2715	4822 124 41584	100uF 20% 10V
2716	2238 586 59812	100nF +80/-20% 50V
2717	4822 124 40433	47uF 20% 25V
2718	4822 124 41584	100uF 20% 10V
2719	2238 586 59812	100nF +80/-20% 50V
2720	2238 586 59812	100nF +80/-20% 50V
2721	4822 124 40248	10uF 20% 63V
2722	2238 586 59812	100nF +80/-20% 50V
2730	4822 126 14472	1uF 10% 10V
2731	2020 552 94427	100pF 5% 50V
2732	4822 124 21913	1uF 20% 63V
2751	2020 552 94427	100pF 5% 50V
2760	2238 586 59812	100nF +80/-20% 50V
2761	4822 126 11785	47pF 5% 50V
2762	2238 586 59812	100nF +80/-20% 50V
2780	4822 126 14472	1uF 10% 10V
2781	2020 552 94427	100pF 5% 50V
2782	4822 124 21913	1uF 20% 63V

RESISTORS

3100	4822 051 30222	2k2 5% 0,062W
3101	4822 051 30332	3k3 5% 0,062W
3102	4822 051 30102	1k 5% 0,062W
3104	4822 051 30472	4k7 5% 0,062W
3105	4822 051 30272	2k7 5% 0,062W
3106	4822 051 30273	27k 5% 0,062W
3110	4822 051 30471	470R 5% 0,062W
3111	4822 051 30102	1k 5% 0,062W
3112	4822 051 30222	2k2 5% 0,062W
3113	4822 051 30103	10k 5% 0,062W
3114	4822 051 30183	18k 5% 0,062W
3115	4822 051 30562	5k6 5% 0,063W
3116	4822 117 12925	47k 1% 0,063W
3117	4822 117 12902	8k2 1% 0,063W
3118	4822 051 30562	5k6 5% 0,063W
3119	4822 051 30221	220R 5% 0,062W
3120	4822 051 30103	10k 5% 0,062W
3121	4822 051 30103	10k 5% 0,062W
3122	4822 051 30103	10k 5% 0,062W
3123	4822 051 30103	10k 5% 0,062W
3124	4822 117 12891	220k 1%
3130	4822 051 30151	150R 5% 0,062W
3131	4822 051 30102	1k 5% 0,062W
3132	4822 051 30102	1k 5% 0,062W
3133	4822 117 12925	47k 1% 0,063W
3134	4822 051 30103	10k 5% 0,062W
3135	4822 051 30153	15k 5% 0,062W
3136	4822 117 12925	47k 1% 0,063W
3140	4822 051 30101	100R 5% 0,062W
3141	4822 051 30101	100R 5% 0,062W
3142	4822 051 30101	100R 5% 0,062W
3143	4822 051 30101	100R 5% 0,062W
3150	4822 051 30222	2k2 5% 0,062W
3151	4822 051 30332	3k3 5% 0,062W
3152	4822 051 30102	1k 5% 0,062W
3153	4822 117 12891	220k 1%
3154	4822 051 30472	4k7 5% 0,062W
3155	4822 051 30272	2k7 5% 0,062W
3156	4822 051 30273	27k 5% 0,062W
3160	4822 051 30471	470R 5% 0,062W
3161	4822 051 30102	1k 5% 0,062W
3162	4822 051 30222	2k2 5% 0,062W
3163	4822 051 30103	10k 5% 0,062W
3164	4822 051 30183	18k 5% 0,062W
3165	4822 051 30562	5k6 5% 0,063W
3166	4822 117 12925	47k 1% 0,063W
3167	4822 117 12902	8k2 1% 0,063W
3168	4822 051 30562	5k6 5% 0,063W
3169	4822 051 30221	220R 5% 0,062W
3180	4822 051 30102	1k 5% 0,062W /22S
3180	4822 051 30103	10k 5% 0,062W /21R
3180	4822 051 30472	4k7 5% 0,062W /37S
3181	4822 117 12925	47k 1% 0,063W
3182	4822 117 12925	47k 1% 0,063W
3200	4822 051 30221	220R 5% 0,062W
3201	4822 051 30123	12k 5% 0,062W
3202	4822 051 30682	6k8 5% 0,062W
3203	4822 051 30273	27k 5% 0,062W
3204	4822 051 30479	47R 5% 0,062W
3205	4822 051 30339	33R 5% 0,062W
3206	4822 051 30102	1k 5% 0,062W
3207	4822 051 30102	1k 5% 0,062W
3208	4822 051 30102	1k 5% 0,062W
3209	4822 051 30102	1k 5% 0,062W
3210	4822 051 30102	1k 5% 0,062W
3230	4822 051 30472	4k7 5% 0,062W
3231	4822 051 30472	4k7 5% 0,062W
3232	4822 051 30562	5k6 5% 0,063W
3233	4822 051 30102	1k 5% 0,062W
3234	4822 051 30103	10k 5% 0,062W
3235	4822 051 30103	10k 5% 0,062W
3236	4822 051 30472	4k7 5% 0,062W
3237	4822 051 30472	4k7 5% 0,062W
3238	4822 051 30562	5k6 5% 0,063W
3239	4822 051 30102	1k 5% 0,062W
3240	4822 117 12891	220k 1%
3241	4822 117 12925	47k 1% 0,063W
3242	4822 117 12925	47k 1% 0,063W
3243	4822 051 30562	5k6 5% 0,063W
3244	4822 051 30472	4k7 5% 0,062W
3245	4822 051 30472	4k7 5% 0,062W
3246	4822 052 10109	⚠ 10R 5% 0,33W
3247	4822 117 13632	100k 1% 0,62W
3248	4822 117 13632	100k 1% 0,62W
3250	4822 051 30221	220R 5% 0,062W

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ELECTRICAL PARTS LIST - AVC BOARD

ELECTRICAL PARTS LIST - AVC BOARD

RESISTORS

3251	4822 051 30123	12k 5% 0,062W		3361	4822 051 30273	27k 5% 0,062W		3481	4822 051 30471	470R 5% 0,062W		3541	4822 051 30471	470R 5% 0,062W	
3252	4822 051 30682	6k8 5% 0,062W		3362	4822 117 12925	47k 1% 0,063W		3482	4822 051 30471	470R 5% 0,062W		3542	4822 051 30471	470R 5% 0,062W	
3253	4822 051 30273	27k 5% 0,062W		3363	4822 051 30472	4k7 5% 0,062W		3490	4822 051 30102	1k 5% 0,062W		3543	4822 051 30471	470R 5% 0,062W	
3254	4822 051 30479	47R 5% 0,062W		3364	4822 051 30223	22k 5% 0,062W		3491	4822 051 30221	220R 5% 0,062W		3544	4822 051 30471	470R 5% 0,062W	
3255	4822 051 30339	33R 5% 0,062W		3365	4822 051 30102	1k 5% 0,062W		3492	4822 051 30103	10k 5% 0,062W		3545	4822 051 30471	470R 5% 0,062W	
3256	4822 051 30102	1k 5% 0,062W		3367	4822 051 30103	10k 5% 0,062W		3493	4822 051 30183	18k 5% 0,062W		3546	4822 051 30471	470R 5% 0,062W	
3257	4822 051 30102	1k 5% 0,062W		3368	4822 051 30102	1k 5% 0,062W		3494	4822 051 30103	10k 5% 0,062W		3547	4822 051 30471	470R 5% 0,062W	
3258	4822 051 30102	1k 5% 0,062W		3370	4822 051 30102	1k 5% 0,062W		3495	4822 051 30102	1k 5% 0,062W		3548	4822 051 30472	4k7 5% 0,062W	
3259	4822 051 30102	1k 5% 0,062W		3383	4822 051 30474	470k 5% 0,062W		3496	4822 051 30103	10k 5% 0,062W		3549	4822 051 30105	1M 5% 0,062W	
3260	4822 051 30102	1k 5% 0,062W		3385	4822 051 30474	470k 5% 0,062W		3497	4822 051 30183	18k 5% 0,062W		3550	4822 051 30103	10k 5% 0,062W	
3290	4822 051 30684	680k 5% 0,062W		3386	4822 051 30474	470k 5% 0,062W		3498	4822 051 30103	10k 5% 0,062W		3551	4822 051 30103	10k 5% 0,062W	
3300	4822 051 30102	1k 5% 0,062W		3387	4822 117 12925	47k 1% 0,063W		3500	4822 051 30471	470R 5% 0,062W		3552	4822 051 30103	10k 5% 0,062W	
3301	4822 051 30102	1k 5% 0,062W		3388	4822 051 30474	470k 5% 0,062W		3501	4822 051 30103	10k 5% 0,062W		3553	4822 051 30103	10k 5% 0,062W	
3302	4822 051 30102	1k 5% 0,062W		3389	4822 117 12925	47k 1% 0,063W		3502	4822 051 30471	470R 5% 0,062W		3554	4822 051 30222	2k2 5% 0,062W	
3303	4822 051 30222	2k2 5% 0,062W		3390	4822 051 30101	100R 5% 0,062W		3503	4822 051 30471	470R 5% 0,062W		3555	4822 117 12891	220k 1%	
3304	4822 117 12891	220k 1%		3391	4822 051 30472	4k7 5% 0,062W		3504	4822 051 30471	470R 5% 0,062W		3556	4822 051 30103	10k 5% 0,062W	
3305	4822 051 30102	1k 5% 0,062W		3392	4822 051 30472	4k7 5% 0,062W		3505	4822 051 30471	470R 5% 0,062W		3560	4822 051 30102	1k 5% 0,062W	
3306	4822 051 30683	68k 5% 0,062W		3393	4822 051 30102	1k 5% 0,062W		3506	4822 051 30471	470R 5% 0,062W		3561	4822 117 13632	100k 1% 0,62W	
3307	4822 051 30683	68k 5% 0,062W		3394	4822 051 30102	1k 5% 0,062W		3507	4822 051 30471	470R 5% 0,062W		3562	4822 117 13632	100k 1% 0,62W	
3308	4822 051 30102	1k 5% 0,062W		3395	4822 051 30102	1k 5% 0,062W		3508	4822 051 30471	470R 5% 0,062W		3563	4822 051 30103	10k 5% 0,062W	
3309	4822 117 13632	100k 1% 0,62W		3396	4822 051 30102	1k 5% 0,062W		3509	4822 051 30471	470R 5% 0,062W		3564	4822 051 30103	10k 5% 0,062W	
3310	4822 051 30103	10k 5% 0,062W		3397	4822 051 30102	1k 5% 0,062W		3510	4822 051 30471	470R 5% 0,062W		3565	4822 051 30102	1k 5% 0,062W	
3311	4822 117 12925	47k 1% 0,063W		3401	4822 117 11817	1k2 1% 1/16W		3511	4822 051 30471	470R 5% 0,062W		3566	4822 051 30102	1k 5% 0,062W	
3312	4822 117 12925	47k 1% 0,063W		3402	4822 117 11817	1k2 1% 1/16W		3512	4822 051 30471	470R 5% 0,062W		3567	4822 051 30272	2k7 5% 0,062W	
3313	4822 051 30123	12k 5% 0,062W		3403	4822 117 11817	1k2 1% 1/16W		3513	4822 051 30471	470R 5% 0,062W		3568	4822 051 30392	3k9 5% 0,063W	/22S
3314	4822 051 30223	22k 5% 0,062W		3404	4822 117 11817	1k2 1% 1/16W		3514	4822 051 30471	470R 5% 0,062W		3568	4822 051 30123	12k 5% 0,062W	/21R
3315	4822 051 30102	1k 5% 0,062W		3405	4822 117 11817	1k2 1% 1/16W		3515	4822 051 30471	470R 5% 0,062W		3570	4822 051 30272	2k7 5% 0,062W	
3316	4822 051 30102	1k 5% 0,062W		3406	4822 051 30759	75R 5% 0,062W		3516	4822 051 30471	470R 5% 0,062W		3571	4822 051 30272	2k7 5% 0,062W	
3317	4822 051 30102	1k 5% 0,062W		3411	4822 117 11817	1k2 1% 1/16W		3517	4822 051 30471	470R 5% 0,062W		3572	4822 051 30681	680R 5% 0,062W	
3318	4822 051 30102	1k 5% 0,062W		3412	4822 117 11817	1k2 1% 1/16W		3518	4822 051 30471	470R 5% 0,062W		3573	4822 051 30681	680R 5% 0,062W	
3319	4822 051 30472	4k7 5% 0,062W		3413	4822 117 11817	1k2 1% 1/16W		3519	4822 051 30471	470R 5% 0,062W		3574	4822 051 30103	10k 5% 0,062W	
3320	4822 117 12925	47k 1% 0,063W		3414	4822 117 11817	1k2 1% 1/16W		3520	4822 051 30471	470R 5% 0,062W		3575	4822 051 30103	10k 5% 0,062W	
3321	4822 051 30102	1k 5% 0,062W		3415	4822 117 11817	1k2 1% 1/16W		3521	4822 051 30471	470R 5% 0,062W		3577	4822 051 30471	470R 5% 0,062W	
3322	4822 051 30102	1k 5% 0,062W		3416	4822 051 30759	75R 5% 0,062W		3522	4822 051 30471	470R 5% 0,062W		3579	4822 051 30103	10k 5% 0,062W	
3342	4822 051 30472	4k7 5% 0,062W		3421	4822 117 11817	1k2 1% 1/16W		3523	4822 051 30471	470R 5% 0,062W		3580	4822 051 30471	470R 5% 0,062W	
3343	4822 051 30472	4k7 5% 0,062W		3422	4822 117 11817	1k2 1% 1/16W		3524	4822 051 30471	470R 5% 0,062W		3581	4822 051 30471	470R 5% 0,062W	
3344	4822 051 30472	4k7 5% 0,062W		3423	4822 117 11817	1k2 1% 1/16W		3525	4822 051 30471	470R 5% 0,062W		3582	4822 051 30103	10k 5% 0,062W	
3345	4822 051 30472	4k7 5% 0,062W		3424	4822 117 11817	1k2 1% 1/16W		3526	4822 051 30471	470R 5% 0,062W		3583	4822 051 30103	10k 5% 0,062W	
3346	4822 117 13632	100k 1% 0,62W		3425	4822 117 11817	1k2 1% 1/16W		3527	4822 051 30471	470R 5% 0,062W		3584	4822 051 30391	390R 5% 0,062W	
3347	4822 051 30103	10k 5% 0,062W		3426	4822 051 30759	75R 5% 0,062W		3528	4822 051 30471	470R 5% 0,062W		3585	4822 051 30391	390R 5% 0,062W	
3348	4822 117 13632	100k 1% 0,62W		3430	4822 051 30103	10k 5% 0,062W		3529	4822 051 30479	47R 5% 0,062W		3586	4822 051 30471	470R 5% 0,062W	
3350	4822 051 30102	1k 5% 0,062W		3431	4822 051 30183	18k 5% 0,062W		3530	4822 051 30479	47R 5% 0,062W		3587	4822 051 30102	1k 5% 0,062W	
3351	4822 051 30102	1k 5% 0,062W		3440	4822 051 30101	100R 5% 0,062W		3531	4822 051 30471	470R 5% 0,062W		3588	4822 051 30102	1k 5% 0,062W	
3352	4822 051 30102	1k 5% 0,062W		3442	4822 051 30222	2k2 5% 0,062W		3532	4822 051 30471	470R 5% 0,062W		3589	4822 051 30103	10k 5% 0,062W	
3353	4822 051 30222	2k2 5% 0,062W		3443	4822 051 30759	75R 5% 0,062W		3533	4822 051 30471	470R 5% 0,062W		3590	4822 051 30103	10k 5% 0,062W	
3354	4822 117 12891	220k 1%		3450	4822 051 30101	100R 5% 0,062W		3534	4822 051 30471	470R 5% 0,062W		3596	4822 051 30471	470R 5% 0,062W	
3355	4822 051 30102	1k 5% 0,062W		3451	4822 051 30222	2k2 5% 0,062W		3535	4822 051 30471	470R 5% 0,062W		3599	4822 051 30471	470R 5% 0,062W	
3356	4822 051 30683	68k 5% 0,062W		3452	4822 051 30759	75R 5% 0,062W		3536	4822 051 30471	470R 5% 0,062W		3600	4822 051 30103	10k 5% 0,062W	
3357	4822 051 30683	68k 5% 0,062W		3470	4822 051 30339	33R 5% 0,062W		3537	4822 051 30471	470R 5% 0,062W		3601	4822 051 30123	12k 5% 0,062W	
3358	4822 051 30102	1k 5% 0,062W		3471	4822 051 30479	47R 5% 0,062W		3538	4822 051 30471	470R 5% 0,062W		3602	4822 117 12903	1k8 1% 0,063W	
3359	4822 051 30333	33k 5% 0,062W		3472	4822 052 10478	⚠ 4R7 5% 0,33W		3539	4822 051 30471	470R 5% 0,062W		3603	4822 051 30123	12k 5% 0,062W	
3360	4822 051 30103	10k 5% 0,062W		3480	4822 052 10478	⚠ 4R7 5% 0,33W		3540	4822 051 30471	470R 5% 0,062W		3604	4822 051 30103	10k 5% 0,062W	

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ELECTRICAL PARTS LIST - AVC BOARD

ELECTRICAL PARTS LIST - AVC BOARD

RESISTORS

3605	4822 051 30123	12k 5% 0,062W
3606	4822 117 12903	1k8 1% 0,063W
3607	4822 051 30123	12k 5% 0,062W
3608	4822 052 10478	⚠ 4R7 5% 0,33W
3609	4822 052 10478	⚠ 4R7 5% 0,33W
3610	4822 051 30103	10k 5% 0,062W
3611	4822 051 30123	12k 5% 0,062W
3612	4822 117 12903	1k8 1% 0,063W
3613	4822 051 30123	12k 5% 0,062W
3614	4822 051 30103	10k 5% 0,062W
3615	4822 051 30123	12k 5% 0,062W
3616	4822 117 12903	1k8 1% 0,063W
3617	4822 051 30123	12k 5% 0,062W
3618	4822 051 30103	10k 5% 0,062W
3620	4822 051 30103	10k 5% 0,062W
3621	4822 051 30103	10k 5% 0,062W
3622	4822 051 30123	12k 5% 0,062W
3623	4822 051 30123	12k 5% 0,062W
3624	4822 051 30153	15k 5% 0,062W
3625	4822 051 30103	10k 5% 0,062W
3626	4822 051 30103	10k 5% 0,062W
3627	4822 051 30123	12k 5% 0,062W
3628	4822 051 30123	12k 5% 0,062W
3629	4822 051 30153	15k 5% 0,062W
3630	4822 051 30103	10k 5% 0,062W
3631	4822 051 30103	10k 5% 0,062W
3632	4822 051 30123	12k 5% 0,062W
3633	4822 051 30123	12k 5% 0,062W
3634	4822 051 30153	15k 5% 0,062W
3635	4822 051 30103	10k 5% 0,062W
3636	4822 051 30103	10k 5% 0,062W
3637	4822 051 30123	12k 5% 0,062W
3638	4822 051 30123	12k 5% 0,062W
3639	4822 051 30153	15k 5% 0,062W
3640	4822 051 30103	10k 5% 0,062W
3641	4822 051 30103	10k 5% 0,062W
3642	4822 051 30123	12k 5% 0,062W
3643	4822 051 30123	12k 5% 0,062W
3644	4822 051 30153	15k 5% 0,062W
3645	4822 051 30103	10k 5% 0,062W
3646	4822 051 30103	10k 5% 0,062W
3647	4822 051 30123	12k 5% 0,062W
3648	4822 051 30123	12k 5% 0,062W
3649	4822 051 30153	15k 5% 0,062W
3650	4822 051 30103	10k 5% 0,062W
3651	4822 051 30103	10k 5% 0,062W
3652	4822 051 30273	27k 5% 0,062W
3653	4822 051 30123	12k 5% 0,062W
3654	4822 051 30153	15k 5% 0,062W
3655	4822 051 30103	10k 5% 0,062W
3656	4822 051 30103	10k 5% 0,062W
3657	4822 051 30273	27k 5% 0,062W
3658	4822 051 30123	12k 5% 0,062W
3659	4822 051 30153	15k 5% 0,062W
3660	4822 051 30101	100R 5% 0,062W
3661	4822 051 30101	100R 5% 0,062W
3662	4822 051 30101	100R 5% 0,062W
3663	4822 051 30101	100R 5% 0,062W
3664	4822 051 30101	100R 5% 0,062W
3665	4822 051 30101	100R 5% 0,062W
3666	4822 051 30101	100R 5% 0,062W
3667	4822 051 30101	100R 5% 0,062W
3668	4822 051 30101	100R 5% 0,062W
3669	4822 051 30103	10k 5% 0,062W
3670	4822 051 30103	10k 5% 0,062W
3671	4822 051 30101	100R 5% 0,062W
3675	4822 051 30109	10R 5% 0,062W
3677	4822 051 30103	10k 5% 0,062W
3678	4822 051 30109	10R 5% 0,062W
3679	4822 051 30101	100R 5% 0,062W
3680	4822 051 30109	10R 5% 0,062W
3681	4822 051 30109	10R 5% 0,062W
3682	4822 051 30109	10R 5% 0,062W
3683	4822 051 30109	10R 5% 0,062W
3684	4822 051 30109	10R 5% 0,062W
3685	4822 051 30109	10R 5% 0,062W
3686	4822 051 30479	47R 5% 0,062W
3687	4822 051 30221	220R 5% 0,062W
3688	4822 051 30105	1M 5% 0,062W
3689	4822 051 30103	10k 5% 0,062W
3690	4822 051 30479	47R 5% 0,062W
3691	4822 051 30479	47R 5% 0,062W
3692	4822 051 30472	4k7 5% 0,062W
3693	4822 051 30103	10k 5% 0,062W
3696	4822 051 30223	22k 5% 0,062W
3697	4822 051 30103	10k 5% 0,062W
3700	4822 051 30272	2k7 5% 0,062W
3701	4822 117 13632	100k 1% 0,62W
3710	4822 051 30759	75R 5% 0,062W
3711	4822 052 10228	⚠ 2R2 5% 0,33W
3713	4822 051 30109	10R 5% 0,062W
3714	4822 051 30109	10R 5% 0,062W
3715	4822 117 12925	47k 1% 0,063W
3716	4822 051 30103	10k 5% 0,062W
3718	4822 051 30472	4k7 5% 0,062W
3719	4822 117 12925	47k 1% 0,063W
3730	4822 117 13632	100k 1% 0,62W
3731	4822 051 30101	100R 5% 0,062W
3732	4822 051 30222	2k2 5% 0,062W
3733	4822 051 30183	18k 5% 0,062W
3742	4822 051 30103	10k 5% 0,062W
3750	4822 051 30272	2k7 5% 0,062W
3751	4822 117 13632	100k 1% 0,62W
3760	4822 051 30479	47R 5% 0,062W
3780	4822 117 13632	100k 1% 0,62W
3781	4822 051 30101	100R 5% 0,062W
3782	4822 051 30222	2k2 5% 0,062W
3783	4822 051 30183	18k 5% 0,062W
4102	4822 051 30008	0R Jumper 0603
4103	4822 051 30008	0R Jumper 0603
4200	4822 051 30008	0R Jumper 0603
4483	4822 051 30008	0R Jumper 0603
4485	4822 051 30008	0R Jumper 0603
4500	4822 051 30008	0R Jumper 0603
4501	4822 051 30008	0R Jumper 0603
4603	4822 051 30008	0R Jumper 0603
4604	4822 051 30008	0R Jumper 0603

COILS & FILTERS

5230	4822 157 62552	Coil 2,2uH 5%
5400	4822 157 10977	Coil 4,7uH 10%
5401	3198 018 31580	Coil 1,5uH 10%
5410	4822 157 10977	Coil 4,7uH 10%
5411	3198 018 31580	Coil 1,5uH 10%
5420	4822 157 10977	Coil 4,7uH 10%
5421	3198 018 31580	Coil 1,5uH 10%
5430	4822 157 71206	FXD IND 0805 100MHz 600R
5431	4822 157 71206	FXD IND 0805 100MHz 600R
5445	4822 526 10704	FXD IND BEAD 100MHz 50R
5482	4822 157 10586	Coil 2,2uH 10%
5530	5322 242 73686	RES CER 12MHz
5531	2422 543 01069	RES XTL 32,768kHz
5532	4822 242 11033	RES XTL 4,332MHz
5533	4822 157 62552	Coil 2,2uH 5%
5581	4822 157 62552	Coil 2,2uH 5%
5582	4822 157 62552	Coil 2,2uH 5%
5600	3198 018 63390	FXD IND SM 1008 33U PM5
5601	3198 018 63390	FXD IND SM 1008 33U PM5
5630	2422 543 01146	RES XTL 16,9344MHz
5640	4822 157 71206	FXD IND 0805 100MHz 600R
5641	4822 157 71206	FXD IND 0805 100MHz 600R
5710	4822 157 10532	Coil 100uH 5%
5711	4822 157 10532	Coil 100uH 5%
5712	4822 157 10532	Coil 100uH 5%
5760	4822 157 10977	Coil 4,7uH 10%
5761	4822 157 70601	IND VAR 7MM 7CHA 100U

DIODES

6131	4822 130 61219	BZX79-B10
6230	4822 130 11397	BAS316
6231	4822 130 11397	BAS316
6232	4822 130 11397	BAS316
6531	4822 130 30621	1N4148
6532	4822 130 31878	1N4003G
6533	4822 130 11397	BAS316
6535	4822 130 31878	1N4003G
6536	4822 130 31878	1N4003G

TRANSISTORS & INTEGRATED CIRCUITS

7100	5322 130 60159	BC847B
7130	9322 150 74668	IC SM TDA7468D
7131	4822 130 40959	BC547B
7132	4822 130 60373	BC857B
7133	3198 010 42310	BC847BW
7150	5322 130 60159	BC847B
7200	4822 130 42804	BC817-25
7201	4822 130 42804	BC817-25
7202	4822 130 42804	BC817-25
7230	4822 209 31378	NJM4556AM
7231	4822 130 60373	BC857B
7232	5322 130 60159	BC847B
7233	5322 130 60159	BC847B
7234	4822 130 60373	BC857B
7235	5322 130 60159	BC847B
7236	5322 130 60159	BC847B
7237	3198 010 42310	BC847BW
7250	4822 130 42804	BC817-25
7251	4822 130 42804	BC817-25
7252	4822 130 42804	BC817-25
7300	5322 130 60159	BC847B
7301	5322 130 60159	BC847B
7330	9322 150 74668	IC SM TDA7468D
7331	9322 150 74668	IC SM TDA7468D
7333	4822 130 60373	BC857B
7334	4822 130 60373	BC857B
7335	3198 010 42310	BC847BW
7336	4822 209 31378	NJM4556AM
7337	3198 010 42310	BC847BW
7339	5322 130 60159	BC847B
7350	5322 130 60159	BC847B
7351	5322 130 60159	BC847B
7400	9322 167 49685	IC SM AD8061ART
7410	9322 167 49685	IC SM AD8061ART
7420	9322 167 49685	IC SM AD8061ART
7421	5322 130 60159	BC847B
7422	5322 130 60159	BC847B
7423	3198 010 42310	BC847BW
7424	3198 010 42310	BC847BW
7440	4822 209 17398	IC SM LD1117DT33
7442	9322 160 50668	IC SM LD1117DT25
7531	9352 686 05118	IC SM SAA6581T
7532	9322 145 26668	M24C02-WMN6
7533	5322 130 60159	BC847B
7534	3198 010 42310	BC847BW
7535	3198 010 42320	BC857BW
7536	3139 110 53241	TMP88CU74YF - 'LX7000S53241'
7537	3198 010 42320	BC857BW

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ELECTRICAL PARTS LIST - AVC BOARD

TRANSISTORS & INTEGRATED CIRCUITS

7538	3198 010 42310	BC847BW
7539	3198 010 42310	BC847BW
7610	3198 010 42310	BC847BW
7612	5322 130 44593	BC369
7613	3198 010 42310	BC847BW
7630	9322 181 11668	IC SM MC74VHC04DT
7631	9352 499 60118	IC SM 74LVC00AD
7632	9322 177 92671	IC SM CS4362-KQ
7634	4822 209 30095	LM833D
7635	4822 209 30095	LM833D
7636	4822 209 30095	LM833D
7660	3198 010 42310	BC847BW
7661	3198 010 42310	BC847BW
7730	5322 209 14481	HEF4053BT
7731	9352 655 87118	IC SM UDA1351TS/N1
7732	4822 209 17398	LD1117DT33
7733	3198 010 42310	BC847BW
7734	5322 130 44593	BC369
7735	3198 010 42310	BC847BW

Note : Only the parts mentioned in this list are normal service spare parts.

P-SCAN BOARD

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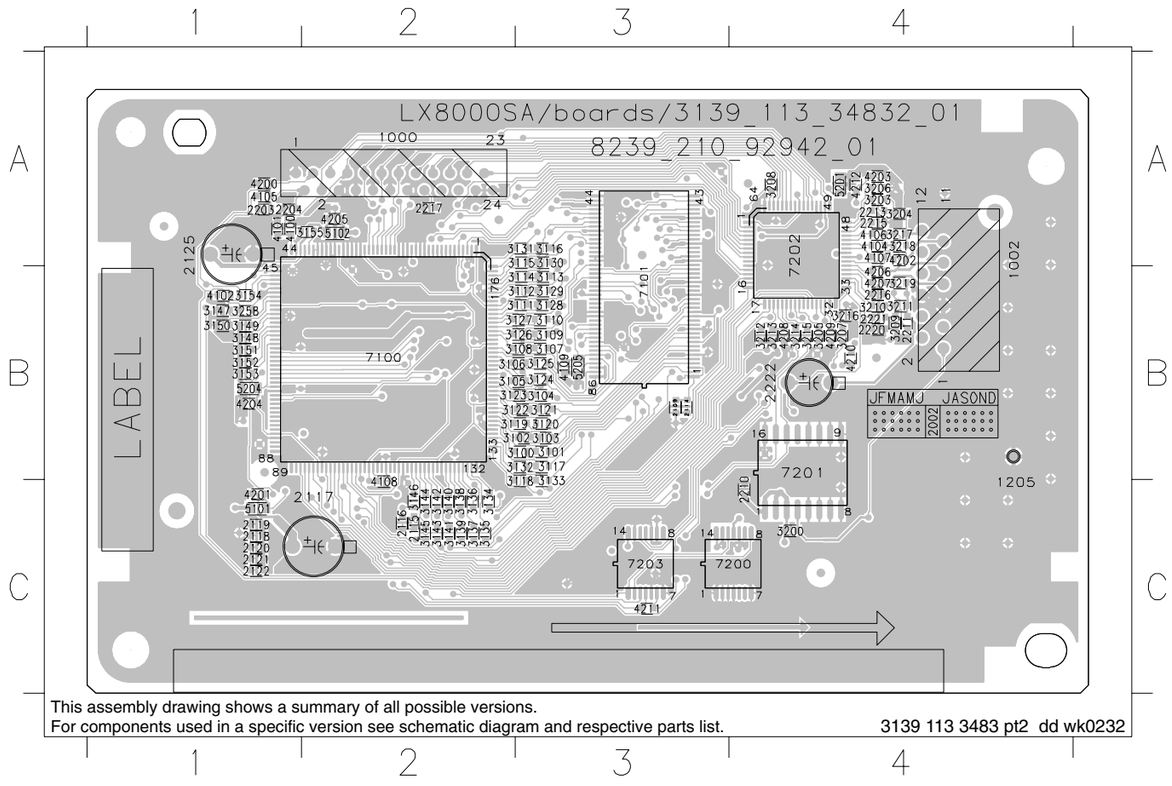
11-1

P-SCAN BOARD - TOP VIEW LAYOUT

1000 A2	2204 A1	3105 B2	3120 B3	3135 C2	3150 B1	3211 B4	4106 A4	4211 C3
1002 A4	2210 C4	3106 B2	3121 B3	3136 C2	3151 B1	3212 B4	4107 A4	4212 A4
1205 C4	2211 B4	3107 B3	3122 B2	3137 C2	3152 B1	3213 B4	4108 C2	5101 C1
2109 B3	2213 A4	3108 B3	3123 B2	3138 C2	3153 B1	3214 B4	4109 B3	5102 A2
2114 B3	2215 A4	3109 B3	3124 B3	3139 C2	3154 B1	3215 B4	4200 A1	5201 A4
2115 C2	2216 B4	3110 B3	3125 B3	3140 C2	3155 A2	3216 B4	4201 C1	5204 B1
2116 C2	2217 A2	3111 B3	3126 B3	3141 C2	3200 C4	3217 A4	4202 A4	5205 B3
2117 C2	2220 B4	3112 B3	3127 B3	3142 C2	3203 A4	3218 A4	4203 A4	7100 C2
2118 C1	2221 B4	3113 B3	3128 B3	3143 C2	3204 A4	3219 B4	4204 B1	7101 B3
2119 C1	2222 B4	3114 B3	3129 B3	3144 C2	3205 B4	3258 B1	4205 A2	7200 C3
2120 C1	3100 B3	3115 A3	3130 A3	3145 C2	3206 A4	4100 A1	4206 B4	7201 B4
2121 C1	3101 B3	3116 A3	3131 A3	3146 C2	3207 B4	4101 A1	4207 B4	7202 A4
2122 C1	3102 B3	3117 B3	3132 B3	3147 B1	3208 A4	4102 B1	4208 B4	7203 C3
2125 A1	3103 B3	3118 C3	3133 C3	3148 B1	3209 B4	4104 A4	4209 B4	
2203 A1	3104 B3	3119 B2	3134 C2	3149 B1	3210 B4	4105 A1	4210 B4	



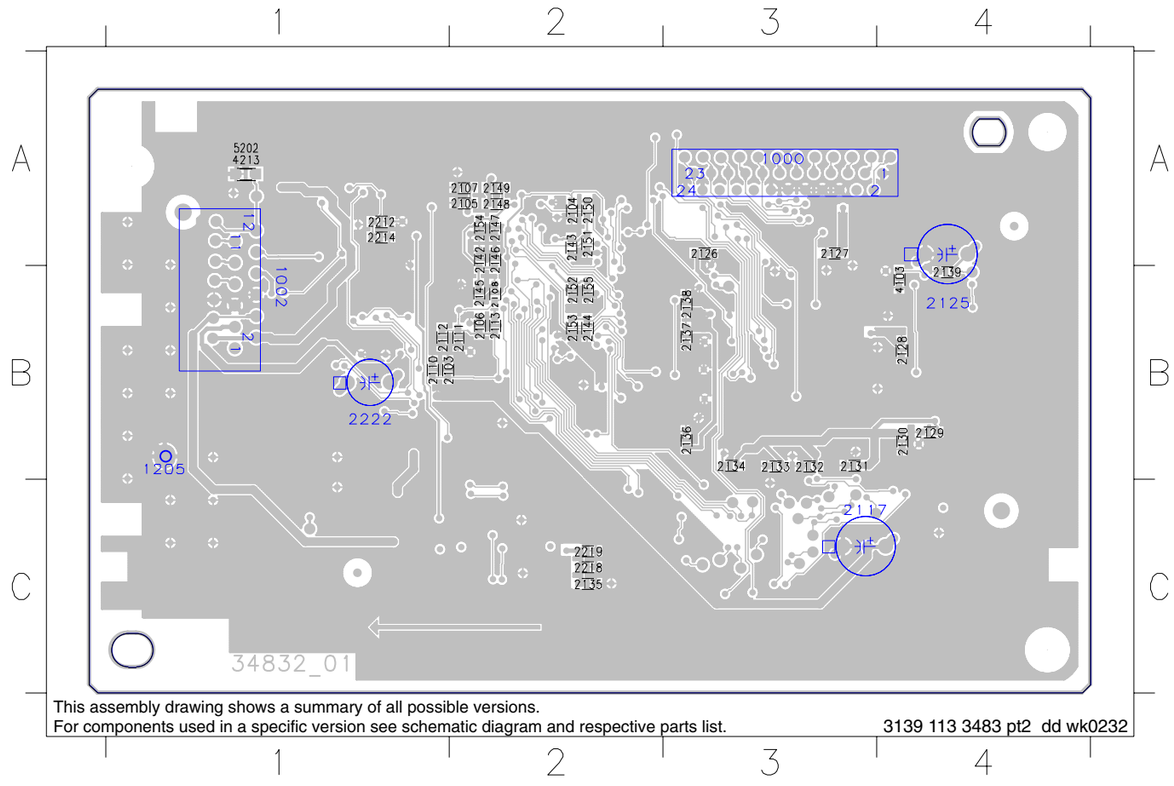
This assembly drawing shows a summary of all possible versions.
For components used in a specific version see schematic diagram and respective parts list.

3139 113 3483 pt2 dd wk0232

11-2

P-SCAN BOARD - BOTTOM VIEW LAYOUT

1000 A3	2106 B2	2113 B2	2129 B4	2135 C2	2143 A2	2149 A2	2155 B2	4103 B4
1002 B1	2107 A2	2117 C3	2130 B4	2136 B3	2144 B2	2150 A2	2212 A1	4213 A1
1205 B1	2108 B2	2125 B4	2131 B3	2137 B3	2145 B2	2151 A2	2214 A1	5202 A1
2103 B1	2110 B1	2126 A3	2132 B3	2138 B3	2146 A2	2152 B2	2218 C2	
2104 A2	2111 B2	2127 A3	2133 B3	2139 B4	2147 A2	2153 B2	2219 C2	
2105 A2	2112 B1	2128 B4	2134 B3	2142 A2	2148 A2	2154 A2	2222 B1	



This assembly drawing shows a summary of all possible versions.
For components used in a specific version see schematic diagram and respective parts list.

3139 113 3483 pt2 dd wk0232

11-3

P-SCAN BOARD - CIRCUIT DIAGRAM (PART 1)

P 1 P-scan_LineDoubler

Decoup Cap for IC7100

EMC CAP

POWER SUPPLY

TEST INPUT

TEST OUTPUT

INPUT SIGNALS

OUTPUT SIGNALS

SDRAM INTERFACE SIGNALS

CONTROL SIGNALS

POWER GND

7100 FLI2200

7101 MT48LC2M32B2TG

CTRL LOGIC

COMMAND DECODE

MODE REG

ADDRESS REGISTER

BANK0 ROW-ADDR LATCH & DECODER

BANK0 MEMORY ARRAY (4,096x256x16)

SENSE AMPLIFIERS

REFRESH COUNTER

ROW ADDR MUX

BANK CTRL LOGIC

COLUMN ADDR COUNTER/ LATCH

COLUMN DEDCODER

I/O GATING DQM DATA LOGIC READ DATA LATCH WRITE DRIVERS

DATA OUTPUT REGISTER

DATA INPUT REGISTER

ADDRESS : CO
DADDR1 : '0'
DADDR0 : '0'

∗ PROVISION

Note : Some values may varies, see respective parts list for correct value.

3139 118 55950...8239_210_92942_01...for 3483 pt2 dd wk0232

1205 B9
2103 B11
2104 B11
2105 B12
2106 B12
2107 B12
2108 B13
2109 B11
2110 B12
2111 B12
2112 B12
2113 B13
2114 B13
2115 G1
2116 F7
2117 C1
2118 C1
2119 C1
2120 C2
2121 C2
2122 C2
2125 C3
2126 A6
2127 A6
2128 A7
2129 A7
2130 A7
2131 A7
2132 A7
2133 A8
2134 A8
2135 A8
2136 A8
2137 A9
2138 A9
2139 C3
2142 B6
2143 B6
2144 B7
2145 B7
2146 B7
2147 B7
2148 B7
2149 B8
2150 B8
2151 B8
2152 B8
2153 B9
2154 B9
2155 B9
3100 G2
3101 G2
3102 G2
3103 G2
3104 H2
3105 H3
3106 H4
3107 H4
3108 I4
3109 I4
3110 I4
3111 H4
3112 H4
3113 H4
3114 I4
3115 I5
3116 I5
3117 F2
3118 F2
3119 G2
3120 G2
3121 G2
3122 G2
3123 H2
3124 I3
3125 I4
3126 H4
3127 H4
3128 I4
3129 I4
3130 H5
3131 H5
3132 F2
3133 F2
3134 F2
3135 F2
3136 F2
3137 F2
3138 F2
3139 F2
3140 F2
3141 G2
3142 G2
3143 G2
3144 G2
3145 F2
3146 F7
3147 G7
3148 F7
3149 F7
3150 F7
3151 G7
3152 G7
3153 G7
3154 G7
3155 G7
3258 G7
4100 G7
4101 G7
4102 G8
4103 G8
4108 F7
4109 B11
4201 B2
4204 A4
4205 B2
5101 B2
5102 B2
5204 A4
5205 B11
7100 C3
7101 C13

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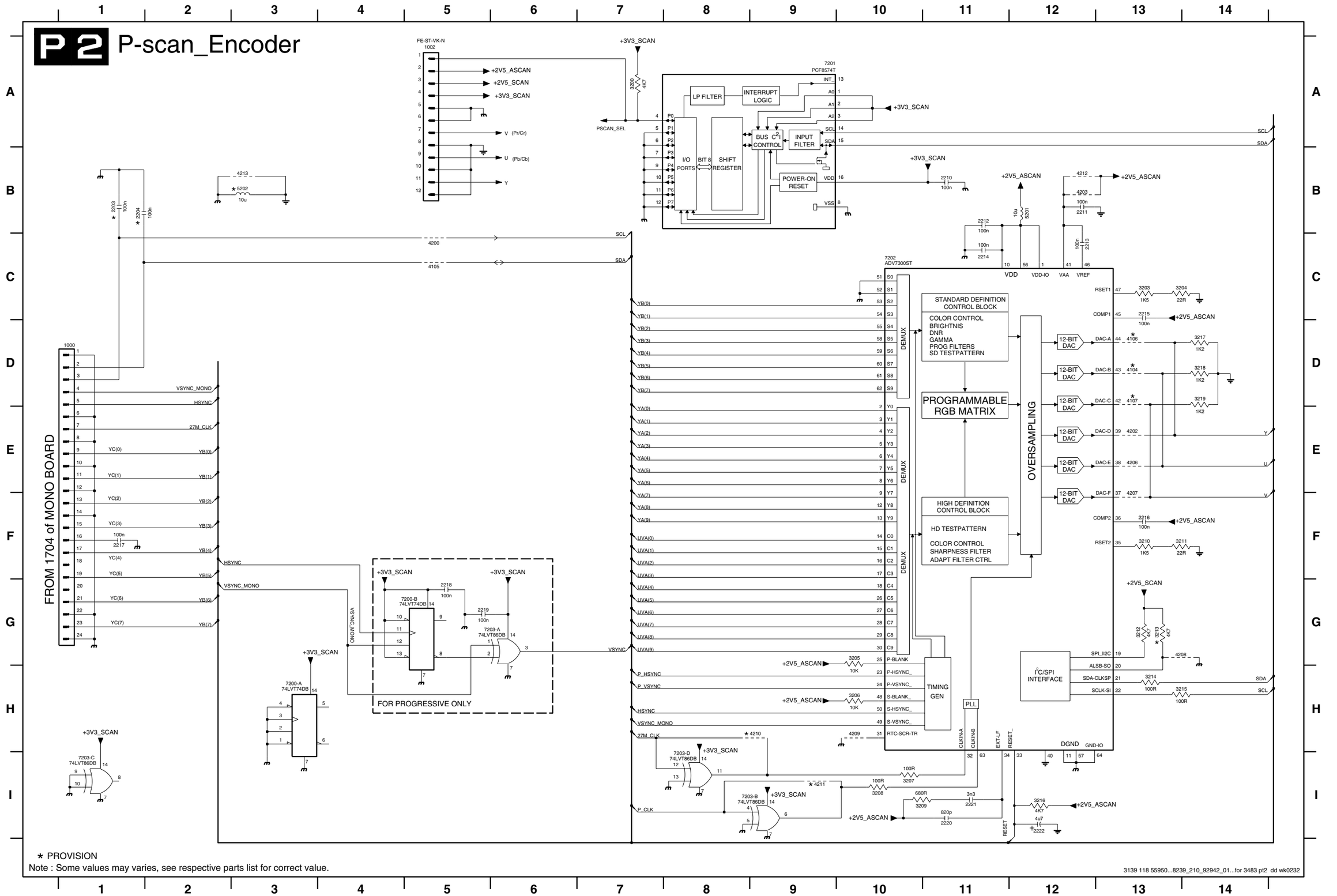
P-SCAN BOARD - CIRCUIT DIAGRAM (PART 2)



1000 D1
1002 A5
2203 B1
2204 B1
2210 B11
2211 B12
2212 B11
2213 C12
2214 C11
2215 C13
2216 F13
2217 F1
2218 G5
2219 G5
2220 I11
2221 I11
2222 I12
3200 A7
3203 C13
3204 C13
3205 G10
3206 H10
3207 I10
3208 I10
3209 I10
3210 F13
3211 F13
3212 G13
3213 G13
3214 H13
3215 H13
3216 I12
3217 D14
3218 D14
3219 D14
4104 D13
4105 C5
4106 D13
4107 D13
4200 C5
4202 E13
4203 B12
4206 E13
4207 F13
4208 G13
4209 H10
4210 H9
4211 I9
4212 B12
4213 B3
5201 B12
5202 B3
7200-A H3
7200-B G5
7201 A9
7202 C10
7203-A G5
7203-B I8
7203-C I1
7203-D I8

* PROVISION

Note : Some values may varies, see respective parts list for correct value.

ELECTRICAL PARTS LIST - P-SCAN BOARD

ELECTRICAL PARTS LIST - P-SCAN BOARD

MISCELLANEOUS

1000	2422 025 17716	Flex Connector 24P
1002	4822 267 51453	Flex Connector 12P

CAPACITORS

2103	4822 126 13879	220nF +80/-20% 16V
2104	4822 126 13879	220nF +80/-20% 16V
2105	4822 126 13879	220nF +80/-20% 16V
2106	4822 126 13879	220nF +80/-20% 16V
2107	4822 126 13879	220nF +80/-20% 16V
2108	4822 126 13879	220nF +80/-20% 16V
2109	4822 126 13879	220nF +80/-20% 16V
2110	4822 126 13879	220nF +80/-20% 16V
2111	4822 126 13879	220nF +80/-20% 16V
2112	4822 126 13879	220nF +80/-20% 16V
2113	4822 126 13879	220nF +80/-20% 16V
2114	4822 126 13879	220nF +80/-20% 16V
2115	4822 122 33741	10pF 10% 50V
2116	4822 122 33741	10pF 10% 50V
2117	4822 124 81286	47uF 20% 16V
2118	4822 126 13879	220nF +80/-20% 16V
2119	4822 126 13879	220nF +80/-20% 16V
2120	4822 126 13879	220nF +80/-20% 16V
2121	4822 126 13879	220nF +80/-20% 16V
2122	4822 126 13879	220nF +80/-20% 16V
2125	4822 124 81286	47uF 20% 16V
2126	2238 586 59812	100nF +80/-20% 50V
2127	2238 586 59812	100nF +80/-20% 50V
2128	2238 586 59812	100nF +80/-20% 50V
2129	2238 586 59812	100nF +80/-20% 50V
2130	2238 586 59812	100nF +80/-20% 50V
2131	2238 586 59812	100nF +80/-20% 50V
2132	2238 586 59812	100nF +80/-20% 50V
2133	2238 586 59812	100nF +80/-20% 50V
2134	2238 586 59812	100nF +80/-20% 50V
2135	2238 586 59812	100nF +80/-20% 50V
2136	2238 586 59812	100nF +80/-20% 50V
2137	2238 586 59812	100nF +80/-20% 50V
2138	2238 586 59812	100nF +80/-20% 50V
2139	2238 586 59812	100nF +80/-20% 50V
2210	2238 586 59812	100nF +80/-20% 50V
2211	2238 586 59812	100nF +80/-20% 50V
2212	2238 586 59812	100nF +80/-20% 50V
2213	2238 586 59812	100nF +80/-20% 50V
2214	2238 586 59812	100nF +80/-20% 50V
2215	2238 586 59812	100nF +80/-20% 50V
2216	2238 586 59812	100nF +80/-20% 50V
2217	2238 586 59812	100nF +80/-20% 50V
2218	2238 586 59812	100nF +80/-20% 50V
2219	2238 586 59812	100nF +80/-20% 50V
2220	3198 016 38210	820pF 25V
2221	5322 126 11579	3,3nF 10% 63V
2222	4822 124 12032	4,7uF 20% 50V

RESISTORS

3100	4822 117 12139	22R 5% 0,062W
3101	4822 117 12139	22R 5% 0,062W
3102	4822 117 12139	22R 5% 0,062W
3103	4822 117 12139	22R 5% 0,062W
3104	4822 117 12139	22R 5% 0,062W
3105	4822 117 12139	22R 5% 0,062W
3106	4822 117 12139	22R 5% 0,062W
3107	4822 117 12139	22R 5% 0,062W
3108	4822 117 12139	22R 5% 0,062W
3109	4822 117 12139	22R 5% 0,062W
3110	4822 117 12139	22R 5% 0,062W
3111	4822 117 12139	22R 5% 0,062W
3112	4822 117 12139	22R 5% 0,062W
3113	4822 117 12139	22R 5% 0,062W
3114	4822 117 12139	22R 5% 0,062W
3115	4822 117 12139	22R 5% 0,062W
3116	4822 117 12139	22R 5% 0,062W
3117	4822 117 12139	22R 5% 0,062W
3118	4822 117 12139	22R 5% 0,062W
3119	4822 117 12139	22R 5% 0,062W
3120	4822 117 12139	22R 5% 0,062W
3121	4822 117 12139	22R 5% 0,062W
3122	4822 117 12139	22R 5% 0,062W
3123	4822 117 12139	22R 5% 0,062W
3124	4822 117 12139	22R 5% 0,062W
3125	4822 117 12139	22R 5% 0,062W
3126	4822 117 12139	22R 5% 0,062W
3127	4822 117 12139	22R 5% 0,062W
3128	4822 117 12139	22R 5% 0,062W
3129	4822 117 12139	22R 5% 0,062W
3130	4822 117 12139	22R 5% 0,062W
3131	4822 117 12139	22R 5% 0,062W
3132	4822 117 12139	22R 5% 0,062W
3133	4822 117 12139	22R 5% 0,062W
3134	4822 117 12139	22R 5% 0,062W
3135	4822 117 12139	22R 5% 0,062W
3136	4822 117 12139	22R 5% 0,062W
3137	4822 117 12139	22R 5% 0,062W
3138	4822 117 12139	22R 5% 0,062W
3139	4822 117 12139	22R 5% 0,062W
3140	4822 117 12139	22R 5% 0,062W
3141	4822 117 12139	22R 5% 0,062W
3142	4822 117 12139	22R 5% 0,062W
3143	4822 117 12139	22R 5% 0,062W
3144	4822 117 12139	22R 5% 0,062W
3145	4822 117 12139	22R 5% 0,062W
3146	4822 117 12139	22R 5% 0,062W
3147	4822 051 30472	4k7 5% 0,062W
3148	4822 051 30472	4k7 5% 0,062W
3149	4822 051 30472	4k7 5% 0,062W
3150	4822 051 30472	4k7 5% 0,062W
3151	4822 051 30472	4k7 5% 0,062W

RESISTORS

3152	4822 051 30472	4k7 5% 0,062W
3153	4822 051 30472	4k7 5% 0,062W
3154	4822 051 30101	100R 5% 0,062W
3155	4822 051 30101	100R 5% 0,062W
3200	4822 051 30472	4k7 5% 0,062W
3203	4822 051 30152	1k5 5% 0,062W
3204	4822 117 12139	22R 5% 0,062W
3205	4822 051 30103	10k 5% 0,062W
3206	4822 051 30103	10k 5% 0,062W
3207	4822 051 30101	100R 5% 0,062W
3208	4822 051 30101	100R 5% 0,062W
3209	4822 051 30681	680R 5% 0,062W
3210	4822 051 30152	1k5 5% 0,062W
3211	4822 117 12139	22R 5% 0,062W
3212	4822 051 30472	4k7 5% 0,062W
3214	4822 051 30101	100R 5% 0,062W
3215	4822 051 30101	100R 5% 0,062W
3216	4822 051 30472	4k7 5% 0,062W
3217	4822 117 11817	1k2 1% 1/16W
3218	4822 117 11817	1k2 1% 1/16W
3219	4822 117 11817	1k2 1% 1/16W
3258	4822 051 30101	100R 5% 0,062W
4101	4822 051 30008	0R Jumper 0603
4103	4822 051 30008	0R Jumper 0603
4105	4822 051 30008	0R Jumper 0603
4200	4822 051 30008	0R Jumper 0603
4202	4822 051 30008	0R Jumper 0603
4203	4822 051 30008	0R Jumper 0603
4206	4822 051 30008	0R Jumper 0603
4207	4822 051 30008	0R Jumper 0603
4208	4822 051 30008	0R Jumper 0603
4209	4822 051 30008	0R Jumper 0603
4212	4822 051 30008	0R Jumper 0603
4213	4822 051 30008	0R Jumper 0603

COILS & FILTERS

5101	4822 157 71593	Coil 10uH 10%
5102	4822 157 11829	Coil 27uH 20%
5201	4822 157 71593	Coil 10uH 10%
5204	4822 157 71593	Coil 10uH 10%
5205	4822 157 71593	Coil 10uH 10%

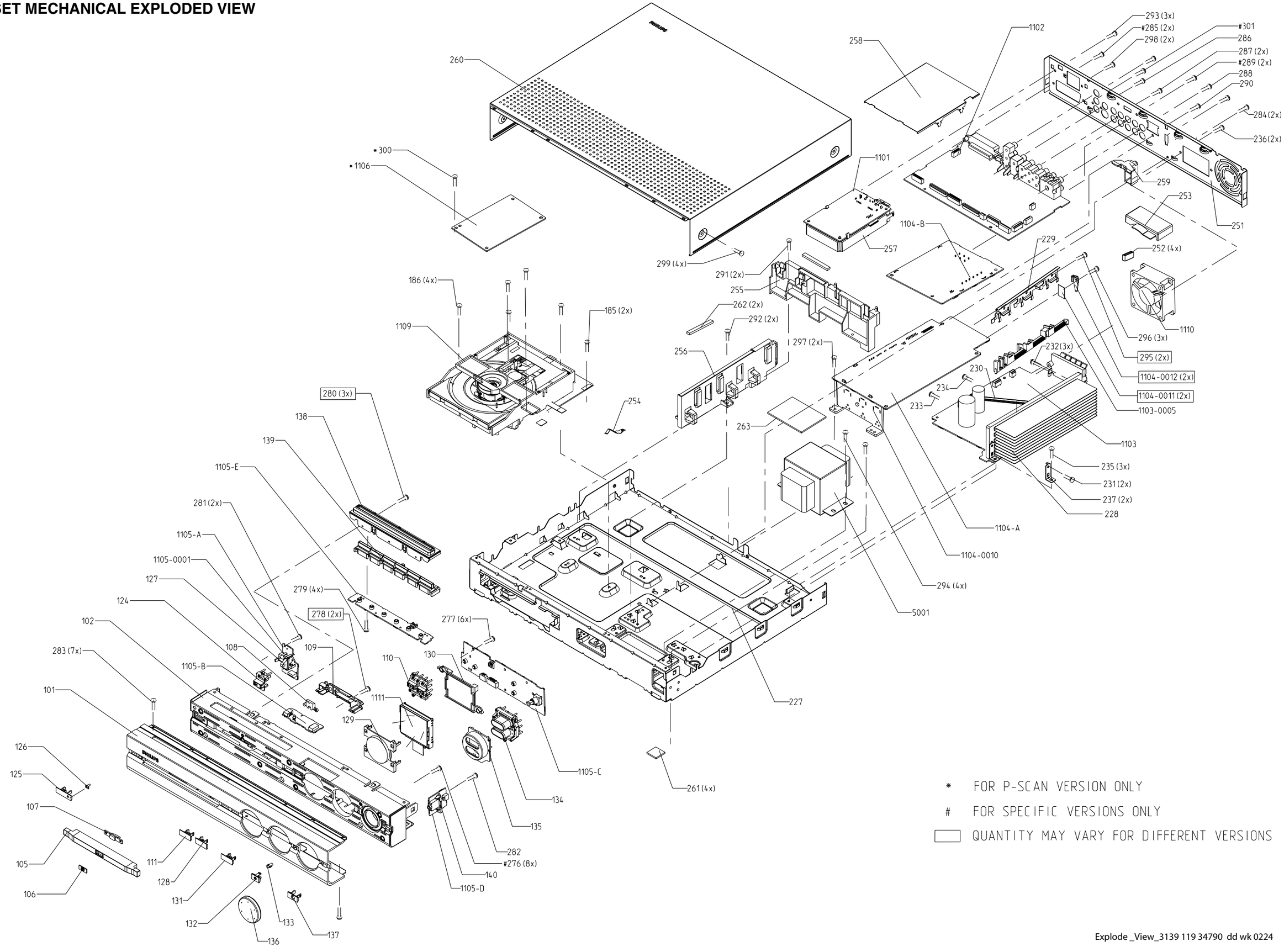
TRANSISTORS & INTEGRATED CIRCUITS

7100	9322 169 18671	IC SM FLI2200
7101	9322 166 71668	IC SM MT48LC2M32B2TG-6
7200	9352 092 60118	IC SM 74LVT74DB
7201	5322 209 11578	IC SM PCF8574T
7202	9322 178 70671	IC SM ADV7300ST
7203	9352 092 90118	IC SM 74LVT86DB

Note : Only the parts mentioned in this list are normal service spare parts.

12-1

SET MECHANICAL EXPLODED VIEW



* FOR P-SCAN VERSION ONLY

\# FOR SPECIFIC VERSIONS ONLY

▭ QUANTITY MAY VARY FOR DIFFERENT VERSIONS

Explode _View_3139 119 34790 dd wk 0224

12-2

MECHANICAL & ACCESSORIES PARTS LIST - MAIN UNIT

0101 *	3139 118 18330	Panel Front	
0101 +	3139 118 17450	Panel Front	
0101^^	3139 118 18781	Panel Front	
0102	3139 118 17330	Cabinet Front	
0105 *	3139 118 17410	Cover Tray DVD	
0105	3139 118 18630	Cover Tray DVD	
0106	3139 118 18340	Cutsheet Logo SACD	
0107	3139 114 76300	Lightguide Tray SACD	
0110	3139 114 75640	Button Open/Close & Source	
0111 *	3139 118 17370	Cap Button Open/Close	
0111	3139 118 18580	Cap Button Open/Close	
0124	3139 114 75600	Button Power	
0125 *	3139 118 17340	Cap Button Power	
0125	3139 118 18570	Cap Button Power	
0126	3139 114 75730	Lightguide Standby	
0128 *	3139 118 17380	Cap Button Source	
0128	3139 118 18590	Cap Button Source	
0129	3139 114 75740	Window Display	
0130 *	3139 114 75760	Bracket LCD LX7000SA	
0130	3139 114 76790	Bracket LCD LX8000SA	
0131 *	3139 118 17420	Cover Orn	
0131	3139 118 18600	Cover Orn	
0132 *	3139 118 17430	Cover Orn IR	
0132	3139 118 18610	Cover Orn IR	
0134	3139 118 17350	Button Sound Control	
0135	3139 118 17360	Cover Sound Control	
0136	3139 118 17400	Knob Volume Rotary	
0137 *	3139 118 17440	Cover Orn Headphone	
0137	3139 118 18620	Cover Orn Headphone	
0138 *	3139 114 75750	Bracket Top Control	
0138	3139 114 76780	Bracket Top Control	
0139	3139 118 17390	Button Top Control Chrome	
0229	3139 111 01460	Spring Clip IC	
0253	3139 114 76330	Bracket Fan Top	
0254	3139 111 01470	Spring Grounding	
0255	3139 114 75770	Bracket AV PCB	
0256	3139 114 75790	Bracket Shield DVD	
0259	3139 114 75780	Bracket PCB Mains	
0261	3139 113 27220	Foot Rubber	
0263	3139 113 27300	Insulation Transformer	
0350 *	3139 118 79730	Box Spk Assy CS7000SA/00S	
0350	3139 118 79720	Box Spk Assy CS8000SA/17S	
0351	4822 303 50063	FM Aerial	
0352 *	3139 118 79700	Subwoofer SW7000SA/00S	
0352 ^	3139 118 79660	Subwoofer SW8000SA/01S	
0352 +	3139 118 79670	Subwoofer SW8000SA/00S	
0352 @	3139 118 79690	Subwoofer SW8000SA/17S	
0353 @	4822 263 21206	Cable Cinch 1,7M (CVBS)	
0354 #	3139 118 79910	Stands Speakers LX8000SA	
0356	3139 238 02020	Remote Control	
0358 @	2422 076 00485	Cord S-Video 1,5M	
0359	2422 076 00479	Cable Cinch 1,5M (Center Out)	
0360 **	3139 111 01661	Scart Cable Assembly	
0360 ^^	2422 076 00374	Cable Cinch 1,5M GN/BU/RD (YUV)	
0361	3103 308 92610	Cable Audio 2x2 RCA Male 1,5M	
0384	2422 549 45067	Antenna AM Loop	
0385	2422 070 98151	⚠ Mains Cord	
0385 @	2422 070 98152	⚠ Mains Cord	
0386 ^	4822 263 21092	⚠ Adapter Plug 6A 250V	
0387 ^	3139 115 21630	Instruction For Use	
0387 @	3139 115 21610	Instruction For Use	
0387 **	3139 115 21600	Instruction For Use	
1110	4822 361 11161	Fan KD1206PTS3	
1111 *	3139 118 79610	LCD Module LX7000SA	
1111	3139 118 79900	LCD Module LX8000SA	
1601	3139 110 35490	FFC Foil 05P/140/05P BD	
1602 ^^	3139 111 01560	FFC Foil 24P/120/24P BD 1mm FD	
1603	3139 110 34100	FFC Foil 04P/140/04P BD	
1604	4822 320 12703	FFC Foil 07P/140/07P BD	
1605	3139 111 01530	FFC Foil 14P/120/14P AD Fold	
1606	3139 110 36071	FFC Foil 30P/100/30P BD 1MMP	
1607 ^^	3139 111 01510	FFC Foil 16P/260/16P AD Fold	
1608	3139 110 36071	FFC Foil 30P/100/30P BD 1MMP	
1609 ^^	3139 110 34990	FFC Foil 12P/120/12P AD	
1610	3139 111 01540	FFC Foil 13P/340/13P AD Fold	
1612	3139 110 34840	FFC Foil 08P/100/08P AD	
1613	3139 111 01550	FFC Foil 4P/480/4P BD Fold	
1615	3139 111 01580	FFC Foil 7P/120/7P AD Fold	
1616	3139 111 01500	FFC Foil 6P/100/6P AD Fold	
1617 **	3139 111 01520	FFC Foil 14P/260/14P AD Fold	
5001 **	3139 118 32530	⚠ Mains Transformer	
5001 ^	3139 118 32540	⚠ Mains Transformer	
5001 @	3139 118 32550	⚠ Mains Transformer	

*	For LX7000SA/22S only
^	For LX8000SA/21R only
+	For LX8000SA/22S only
@	For LX8000SA/37S only
**	For LX7000SA/22S & LX8000SA/22S only
^^	For LX8000SA/21R/37S only
#	For LX8000SA/21R/22S/37S only

Note : Only the parts mentioned in this list are normal service spare parts.

SCREW LISTS - MAIN UNIT

185	M3 x 6
186	M3 x 6
231	D3 x 8
232	D3 x 12
233	D3 x 12
234	D3 x 12
235	M3 x 6
236	D3 x 10
276 *	D2 x 8
277	D3 x 10
278	D2 x 8
279	D2 x 8
280	D2 x 8
281	D3 x 10
282	D3 x 10
283	M3 x 10
284	M3 x 6
285 **	D3 x 10
286	D3 x 10
287	D3 x 10
288	D3 x 10
289 ^	D3 x 10
290	D3 x 10
291	M3 x 6
292	M3 x 6
293	D3 x 10
294	M3 x 6
295	D3 x 8
296	D3 x 8
297	M3 x 6
298	M3 x 10
299	D3 x 10
300 ^^	M3 x 6
301 ^^	D3 x 10

*	For LX7000SA/22S only
^	For LX8000SA/21R only
**	For LX7000SA/22S & LX8000SA/22S only
^^	For LX8000SA/21R/37S only